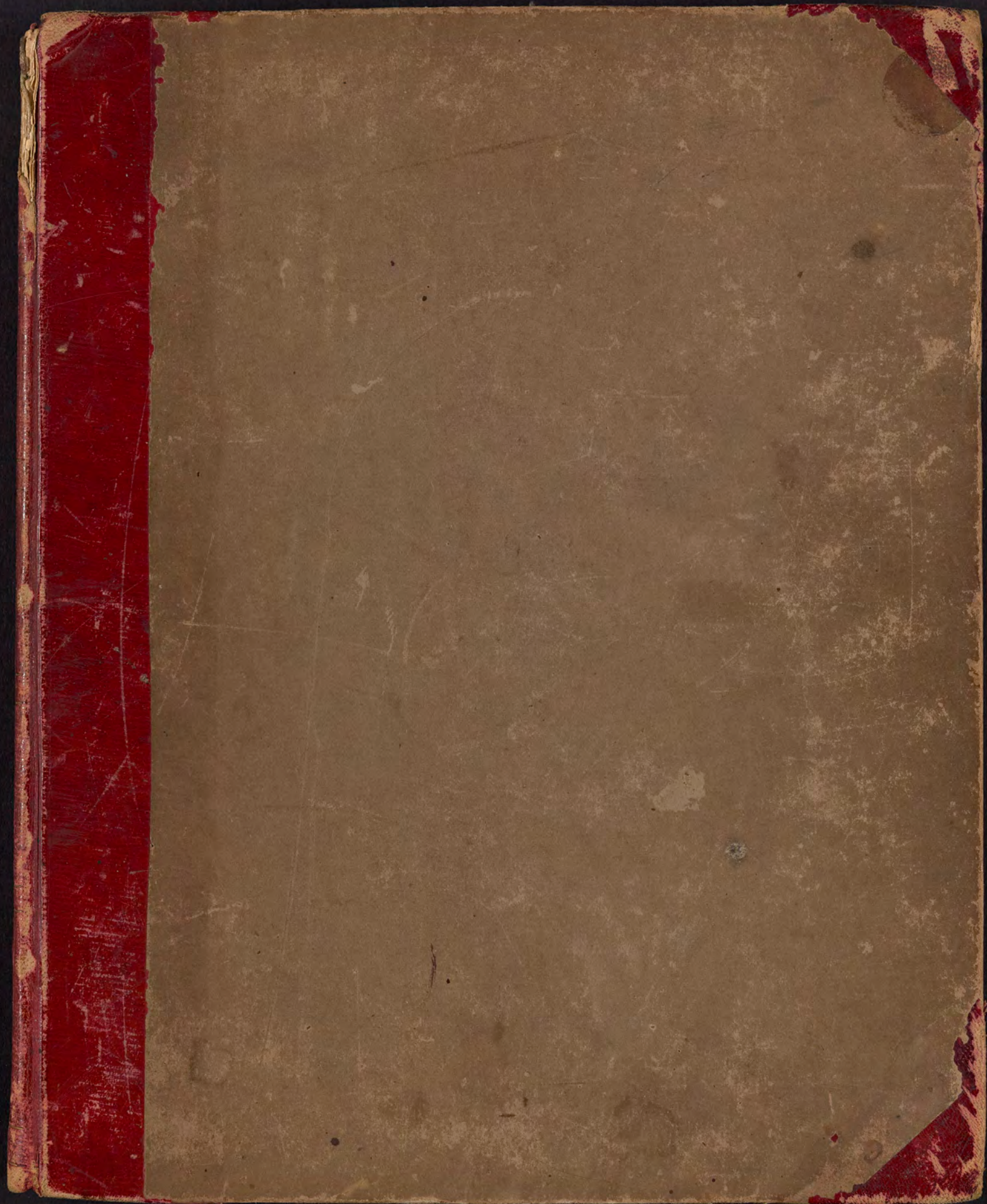


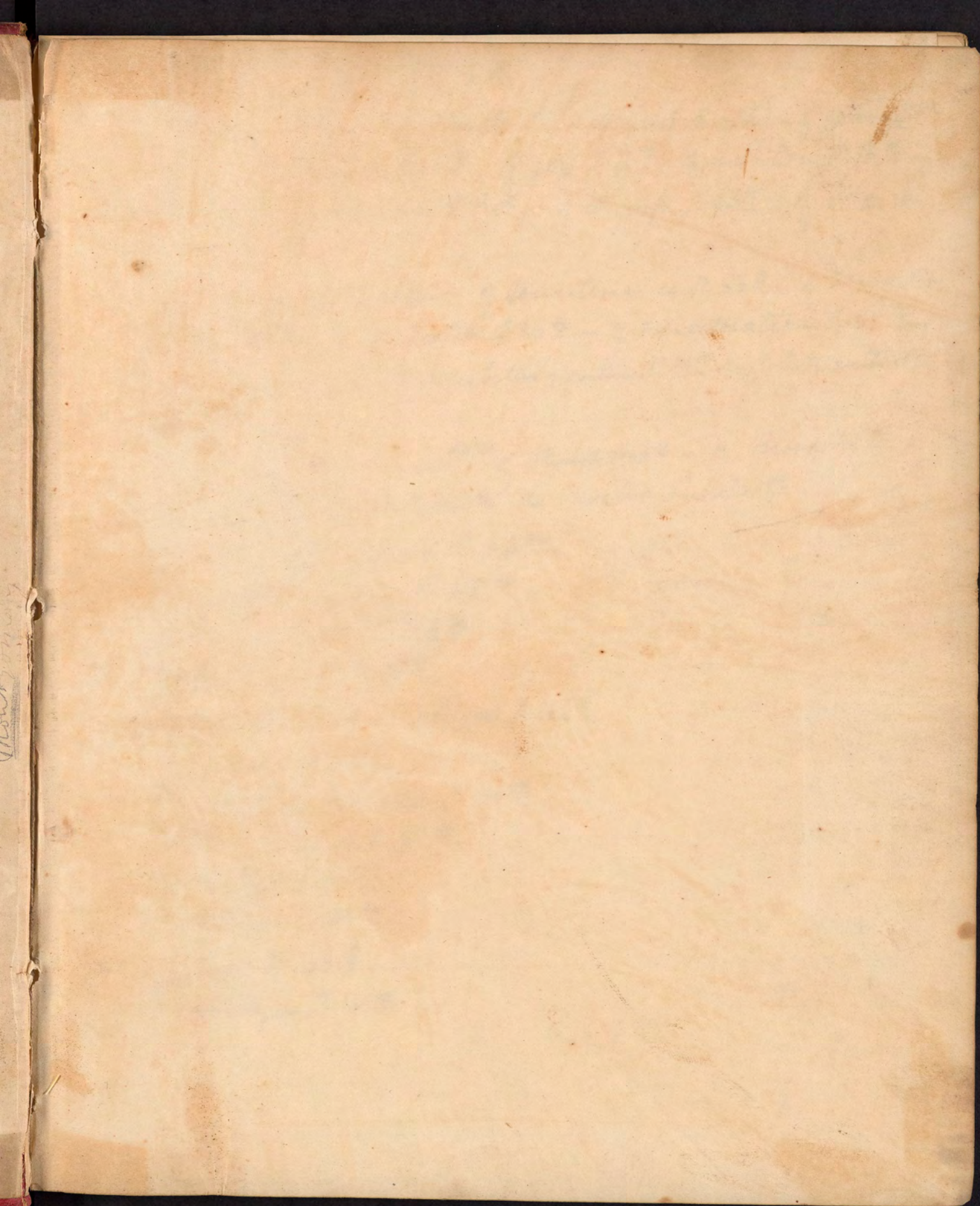


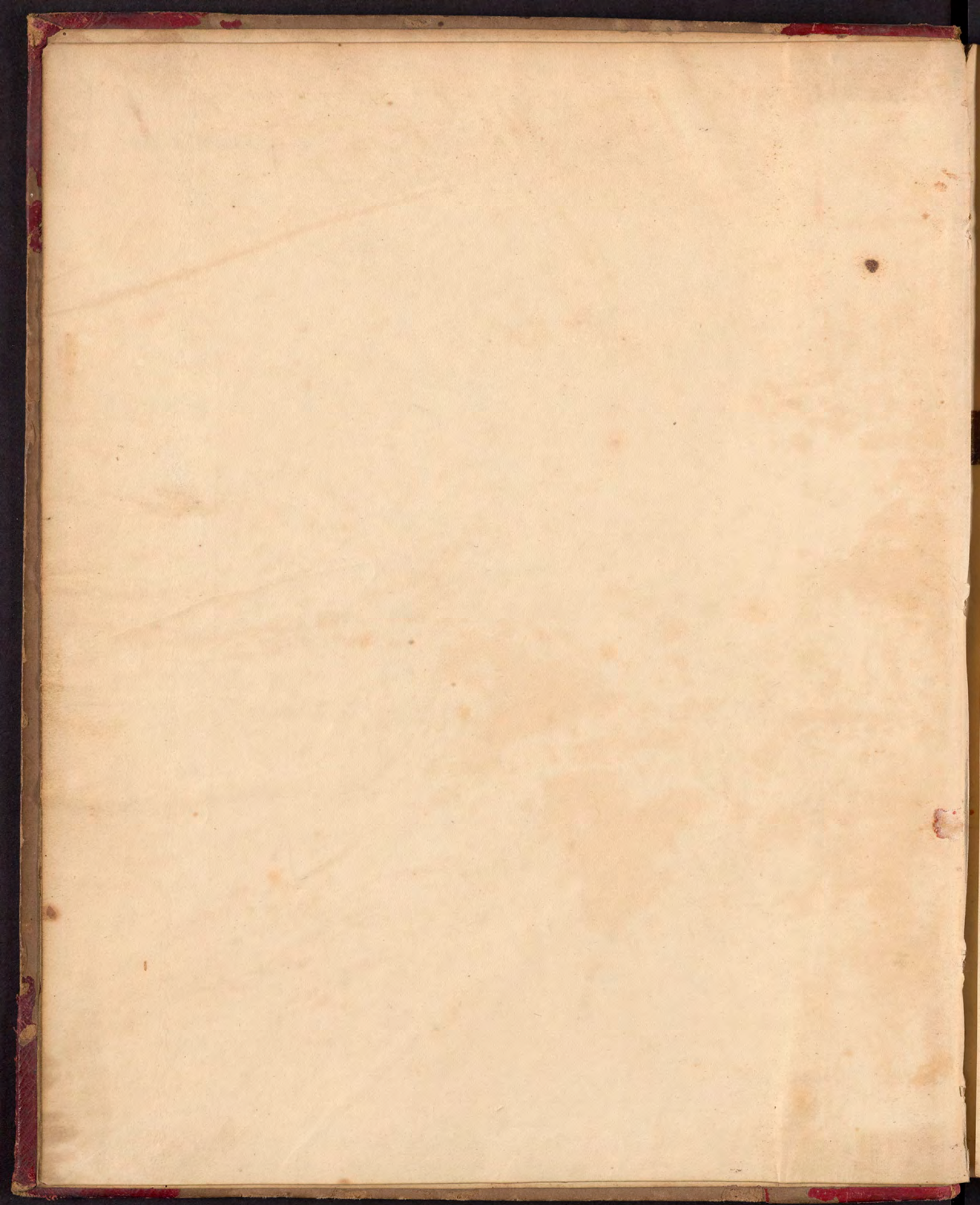
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Pathology

By a very natural transition - we now pass from the exhibition
of the body in a healthy state - to the consideration of it as
afflicted by various diseases - that I should dwell on this
subject is the more necessary as I have no work to do
I can refer you for information - Nearly a century has
elapsed since any book has been published properly
the department of medicine - You may well conceive how
unqualified cannot be the author which it contains
The work of Gualtieri to which I allude is only interesting
as it affords a humorous exposition of the doctrines of
the Humoral Pathology - In compiling any book it has
been assisted only by such information as has been
not from general readings and by any theoretical
reflections on the subject - The term Pathology is
applied to signify a discourse or dissertation on
disease - It must in the most extensive sense it
be the consideration of the cause - nature - progress
state - symptoms and effect of every kind of disease
to which the human system is liable - It is the
history of the various conditions of the human
system the science of Physiology - which as you
have treated of the functions of our system in the
healthy state - but in treating on the subject I shall not
at present enter into a detail of all the various
diseases which under it - I shall limit myself to a

Pathology

By a very natural transition - we now pass from the exhibition of the body in a healthy state - to the consideration of it - as altered by morbid impression - that I should dwell on this - subject is the more necessary - as I have no work to which I can refer you for information - Nearly a century has elapsed since any book has been published professedly on this department of science - You may well conceive how antiquated must be the notions which it contains. The work of Gaubius to which I allude is only interesting as it affords a luminous exposition of the doctrines of the Humoral Pathology - In compiling my lectures I have been assisted only by such information - as I could collect from general reading - and by my observations and reflections on the subject - The term Pathology is of Greek origin - and signifies a discourse or dissertation on diseases - At present in its most extensive sense it embraces the consideration of the causes - nature - difference - seats - symptoms and effect of every morbid affection to which the human system is liable - It is in fact the history of the diseased conditions of the human body and is the reverse of Physiology - which as you all know treats of the functions of our system in their healthy state - but in treating on the subject I shall not at present enter into a detail of all the circumstances included under it - I shall limit myself to a -

General account of the causes deferring the other part untill I come to the Practice of Physick - and to the consideration of each disease separately - the connexion will be thus better preserved - and the whole will be rendered more interesting and instructive.

In the Schools of Medicine the causes of diseases have been divided into four kinds - The Remote - the Predisposing - the occasional or exciting - and the Proximate - therefore it may be considered as a chain of four links - By the Remote cause is meant whatever predisposes to any disease - And the circumstances exciting this predisposition into action is the occasional or exciting - The Proximate cause is defined by Gubius who was followed by Rush "ipse morbus" - the disease itself - but this will be rendered more intelligible by giving an illustration - The common inflammatory fever will answer our purpose very well - Cold the remote cause produces debility or that state of the body which constitutes predisposition - the heat of a rose or some other stimulating agent is the occasional or exciting cause - and a disturbance or derangement of the system is the proximate - cause of the fever itself - hence it follows that really there are but two causes - since - the predisposing is only the effect of the remote - and the proximate of the exciting cause - Some diseases have no more than a single cause - of this kind are Small Pox - Hydrophobia and tetanus - not to adduce a greater number of examples can we not in these cases trace up the disease to the immediate application of the virus to the skin

or to an injury of the nerve - without any interposing debility or subsequent excitation - What happens when a large quantity of poison is taken into the stomach? The effects are immediately perceptible and there is not time sufficient to suppose a predisposing or exciting cause - without impeaching the general correctness of the proposition - that debility is always the cause of disease - There are exceptions enough to show that it is not universal - for in some cases neither predisposition or an exciting ^{cause} is necessary to the most morbid impression. The remote causes may be divided into such as are inherent in the system and such as are external. As examples of the inherent may be mentioned - natural or acquired deformities - a narrow chest - depressed sternum - crooked spine - large head - imperforate anus or hypospadias - give rise to many diseases - To the same class may be referred what are called hereditary dispositions - the diseases which are derived from inheritance are principally Gout - Epilepsy - Mania - Scrophula - Rickets - and Pulmonary consumption - To ascertain how this inheritance is effected and on what it depends would constitute an interesting inquiry - It is commonly said to proceed from ancestral taint or contamination - but no definite meaning can be attached to phraseology so indistinct - This explanation had its origin in the doctrines of the Humoral Pathology - Even admitting the contamination of the fluids in Consumption and Scrophula - which however I am by no means disposed to do - - -

we could hardly suppose the occurrence of such an event in Epilepsy and Insanity - All that we know certainly on this subject is - that these children who most resemble their parents in external aspect - resemble them also in internal conformation - and there are said to have a peculiar aptitude for the diseases of inheritance - Other states of the system predispose to disease - they are called temperaments and have been divided into four kinds - ~~By~~ The Sanguineous - the Bilious - the Phlegmatic - and the Melancholic - Much dispute has existed on the theory of these different conditions of the system - by all the writers of antiquity they are attributed to the various proportions of the different fluids - thus the Sanguineous was thought to arise from a predominance of blood the Bilious from bile - the Phlegmatic from phlegm and the Melancholic from black bile - Boerhaave's theory is not very different from this and allowing for his attachment to the humoral Pathology - is perhaps the most entire and interesting account which has been given on the subject - As Physiology became divested of the subtleties which encumbered it - the confined notions of the ancients were abandoned - and the different temperaments are now held to arise from the various proportions of the parts of our system whether fluid or solid and actuated by some moral or intellectual influence - These dispositions are marked by external characteristics

which may be easily distinguished - The Sanguineous
 is attended with flaxen or auburn hair - or red hair - flesh
 soft - full habit - a clear florid complexion - a fierce ex-
 -pression of the eyes - and a temper ardent and passionate
 this temperament disposes to inflammatory complaints
 The bilious is marked by dark curly hair - a figure
 muscular and evenly - but not inclined to corpulence
 a brown complexion - a pulse quick and active - and
 a temper fierce - obstinate and unrelenting - persons
 possessing this temperament are ^{apt} liable to be affected
 with visceral diseases - as inflammation of the liver &c
 The Phlegmatic temperament - known also by the names
 of the pituitous and Sympathetic - It is marked by ex-
 -treme smoothness of skin - thin white hair - pale
 complexion - attenuated form - a weak and relaxed
 habit - small pulse - and timid and irresolute mind
 It predisposes to cachectic and nervous diseases - --
 The Melancholic temperament is known by the fol-
 -lowing signs - hanness of person - a dry skin - a dark com-
 -plexion - hair and eyes of the same colour - a small and
 full pulse - great sensibility - and a temper peevish
 fretful - morose and gloomy - there is little physical
 or mental energy - Nervous disorders are the consequence
 of this temperament (on the temperaments see Chopin's
 remarks in his Richard)

Next among the inherent causes of disease may be mentioned
 the influence of the passions and emotions of the mind
 Need you be told that this is of great importance? But it
 is not my design at present fully to divulge their interesting
 nature - I shall consider them only as articles of Pathology -
 or in other words as causes of disease - Little effects and expe-
 -rience of the passions are required to persuade us that they
 exert a great influence over the animal economy - and are
 no slender sources of morbid affections - They have been
 divided into two classes according as they are hurtfull or salu-
 -tary - Examples of the first are - fear - grief - anger - despair -
 Envy - jealousy - and perhaps revenge - these are destructive
 to health and subverive of every comfort of life - - - -
 Among the second class are - hope - love - ambition - joy -
 -and courage - Each of these are distinguished by certain
 peculiar signs - The malignant passions are character-
 -ized by a pale - haggard countenance - while those of an
 opposite character are marked by the cheerful smile -
 and the roseate hue of health - Before considering them
 separately I will remark that those which are opposite
 in their nature are often uniform in their effects on
 the system - Thus as agents in the body anger and joy
 are not dissimilar - both increase the energy of the heart
 and arteries - swell the volume of the muscles - give the
 skin a ruddy hue - produce a determination of blood to the
 head - and impart fire and brilliancy to the eyes - They both
 produce apoplexy and convulsions - syncope and other sim-
 -ilar affections - Nevertheless there is a great difference in

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their operations as every one must experience from his own consciousness - a person can always distinguish them in himself and others - In treating of the passions separately I commence with Fear

Fear - This when carried to any extent is accompanied with a pale countenance - contracted skin - wildness of the eye - distressing palpitations of the heart - painful frequency of respiration - a weak pulse - and a trembling agitated condition of the whole body - But in cases where it is carried to a great extent the effects are more violent - extreme terror occasioning a ghastly countenance - at other times it is accompanied by a complete prostration of muscular power and the person affected falls down in a state of cataplexy. There are its consequences when most sudden and vehement. But slight fear also proves the predisposing - as well as the exciting cause of disease - every practitioner of Philadelphia has seen this exemplified in the epidemics which sometimes have visited our city - At this season of general dissolution often has the spectacle of a passing corpse the sound of a hearse - the tolling of the bells - the intelligence of the loss of a friend or an increase in the return of the dead actually excited the disease where it did not exist and destroyed those that were but slightly affected - nor is it under such circumstances alone that fear produces disease - it also increases the nervous disorders and not unfrequently produces Dysentery - Diabetes - Nausea - and suppression of the Catamenia

in pregnant women it is apt to occasion abortion and uterine hemorrhage - even insanity permanent and incurable has resulted from a powerful shock of fear

Grief Intense and long continued grief depresses the energies of the mind and wastes the vigour of the body it is accompanied with dejection of countenance - paleness of skin and more remotely with lameness and evacuation of the whole body sometimes it is so severe ^{& violent} as to produce a train of fatal consequences - It attacks the stomach and chylific viscera - disordering the functions of these organs and the mind is finally brought into a state of furious derangement or sinks into gloom and melancholy -

Jealousy Not the least powerfull of the passions which
 agitate the frame is jealousy - This is rarely simple - it is
 compounded of fear - suspicion - despair & revenge - it may
 be said to act with the combined power of all - it attacks
 the soul with unrelenting torture - and preys on the heart
 like the famished harpies - but this eternally self torcen-
 -ting passion is not productive of any serious diseases -
 Cases have occurred where the brain has become disordered
 with various stages of intellectual alienation - The an-
 -cients supposed it to fix principally on the liver - and the
 "tumidum pecus" of Horace must be familiar with the memo-
 -ry of every classical scholar - perhaps the vulture feeding
 on the heart of Prometheus is the same idea shadowed
 out and embraced in a poetical epilogue

Anger Is among the most stimulating of the passions
 and when exasperated into rage is sometimes productive of
 perfect madness - this passion is to the mind what a
 whirlwind is to the atmosphere - given up to anger man
 is no longer under the control of reason and is ready
 to commit every sort of rashness and indiscretion - Its physical
 effects are ^{very} much the same as those of joy - By the blood which
 it determines to the head - as is known by the suffusion of
 the face - the fiery glare of the eye and the violent pul-
 -sations of the carotid artery - it is apt to occasion affections
 of the brain as Mania and Apoplexy - Many instances
 have been recorded where men in a paroxysm of this pas-
 -sion have been suddenly ~~cut~~ cloven down by the hand of death
 of this fact John Hunter is a remarkable example - he
 fell into a violent rage in consequence of the improper
 application of some dressings - and immediately expired
 A shoemaker of this city being while at work - very much
 pestered by some boys in the street - ran out of the
 shop and fell down dead - while in the act of pursuing
 his tormentors - But there are not the only effects of
 anger like a debauch in wine it predisposes the body
 to many diseases - During the prevalence of Epidemics
 this is particularly remarkable and it is not less known
 in the female sex - Anger is apt to occasion hæmorrhage
 from the lungs or uterus and even to produce abortion
 Such then being the evil consequences of this pern-
 -cious passion - I enjoin on you in the language of Holy writ
 "Suffer not the sun to go down on your wrath"

I next pass to those passions and emotions which are of an opposite nature or to those which have been denominated salutary - and first let us speak of love - - - -

Love It is obvious that it is prejudicial to the health only when in excess and perverted from its true course. Love when successful and properly regulated - is a state of feeling most natural and delightful - to be the cause of disease it must be ill regulated and intemperately indulged - When disappointed in its objects it produces many sensible effects on the system - there have been an inexhaustible number of the poets and have sometimes come under the physicians notice - The mind and body are both affected - but the passion operates differently as it is attended with hope or despair. Yet the most distant prospect of success remain and the soul is agitated by a tumult of conflicting passions - but when hope is extinct and despair seizes the mind of the lover - he is either depressed into the gloom of melancholy or is driven to actual insanity - To the other symptoms are added dyspepsia and a long train of nervous affections

J. H. Every one who has felt the effects of joy knows
 knows it to be highly exhilarating and stimulant - it agi-
 -tates the whole frame - gives to the face a vivacity of
 expression and produces a flush and glow on the coun-
 -tenance - the effects of excessive joy are Syncope - Coma
 Apoplexy - and palsy Many of you are familiar with
 the story of the Roman mother - who died when she heard
 of the safety of her son - whom she supposed was killed
 in battle - The annals of our own country afford an
 instance of a similar nature - when the glorious in-
 -telligence of the capture of Cornwallis was received - the
 janitor of Congress overcame by the influence of an
 ardent patriotism fell down lifeless in a fit of Apoplexy

Ambition Little less exciting than the passion of joy is the passion of ambition - legitimately indulged it is not injurious to health - carried to a great extent it has been called the infirmity of noble minds - and is apt to be illicit in its nature or to grasp at objects too gigantic for its powers - when disappointed it becomes the cause of vexing cares and tormenting solicitude - the mind worn out by anxiety and trouble is prone to derangement - and the body is exposed to the attack of many diseases - Every hospital contains some victims of this lofty and generous passion I have myself been witness to two remarkable cases - one (man) had desired to lead his country's arms to battle - and the other had hoped by his eloquence - his energy and wisdom to sway the destinies of an empire

We now pass from the intrinsic causes of disease to those which are external and adventitious

The atmosphere holds the first rank in this new series of causes - I need hardly tell you that it becomes so by certain properties which it occasionally acquires - among which the most operative and conspicuous are heat and cold - The effects of a heated atmosphere in producing disease has been universally confessed its influence indeed has been proverbial from the dawn of Medical Science to the present day - hence in the times of the Greeks & Romans and by the earlier modern writers - a burning atmosphere and the devastation of disease were considered as 'invariably associated' - even the poets who though the sons of fancy and the fatters of fable are yet among the most accurate observers of nature - always connect the rage of Lyricus with the pestilence of disease - The influence of the atmosphere on the health of man is too well attested - to demand any particular illustration - we see it in our own climate and still more in tropical climates - Regions - when an inhabitant of higher latitude visits our country in the temperate season - he seldom experiences any injury to his health - but if he comes in the heat of summer - he hardly ever escapes an attack of some malignant disease - The action of heat in producing these effects is easily intelligible it is a direct stimulant - which at first excites the body and then leaves it in a state of laxitude and debility - extremely favourable to the inroads of disease - The coup de soleil or stroke of the sun is one of the immediate consequences

of extreme heat - To this may be added a long train of fevers - intestinal diseases and cutaneous affections. By imparting undue activity to the circulation it occasions Apoplexy - Hemorrhage - and many other complaints depending on an increase of blood in action in the bloodvessels.

Cold is another state of the atmosphere - which - proves a painful source of disease - more especially when it succeeds the heat - as is frequently the case in the vicissitudes of our variable climate - This change of temperature produces more complaints in our country than all the other causes united. The effects of cold are modified by the manner and degree in which it is applied - Exposed to a low temperature the system is directly depressed - cold in this case acts as a sedative and the debility induced by it predisposes to disease - but suddenly applied it is a stimulant and proves the exciting cause of a multitude of complaints - The predisposition to any disorder is called into action - Thus when any epidemic - as the Influenza is prevailing the system often becomes impregnated with the seed - that are floating in the atmosphere which by a sudden change from heat to cold are caused

into action - extend wide by their malignant influence -
 and swell the bills of mortality - like heat cold lays the
 foundation of one of the worst forms of pestilential disease
 long ago it was proved by Heberden that intense and
 long protracted cold never failed in England to produce
 some new epidemic or to aggravate the disease which
 might be prevalent - the same may be said with respect
 to the cold countries - the North of Europe during the most
 severe part of winter is very subject to epidemics
 We all know how the United States have been desolated
 by a disease the origin of which may be traced to
 cold - No opinion is better founded on fact than
 that our clear cold winters are very prejudicial
 to health - my own experience satisfies me that no
 condition of temperature has such an effect on diseases.
 every form of inflammation is aggravated to an
 enormous extent - It deranges the functions of
 health and destroys that just equilibrium which
 should always be preserved

Humidity - Much has been said of the humidity or moist-
ness of the atmosphere as a cause of disease - by many
medical authors this is thought to be more active than
either of the preceding causes and popular prejudice
confirms this sentiment - No one can deny that great
and sudden transition from one state of atmosphere
to another may prove the cause of a variety of complaints
by the laws of our system and new action - by whatever cause
excited causes more or less derangement in the healthy opera-
tions - but how far a climate permanently moist will have
the same effect is not so accurately ascertained.

Notwithstanding what has been alleged to the contrary I can
not help believing that it promotes health and vigour of
constitution and is most favourable to longevity - contrary
as my opinion may appear to the tenor of Medical reason
and observation I shall not fear to defend it against a-
ny attack however ingenious - but this is not the place
to enter into a minute description of such a nature as
fully to unfold the grounds on which my doctrine rests
It is enough at present to mention that people the most
hardy - long lived - and possessing the greatest exuberance of
health are to be found in ~~low~~ countries - Enveloped in
perpetual clouds we behold the ~~Holander~~ ^{Dutch}lander the most
ingenious of his species - while the Italian who lives under
a sky of perpetual brightness - is puny - of a cadaverous
complexion and constantly liable to sickness - Let us extend our
inquiries into other sections of the Globe and they will be
followed by the same results

Considering the analogy in many respects between the
 economy of animals and vegetables it is not unlikely
 that a certain degree of moisture will be found in-
 dispensable to the well being of both. Nevertheless I
 do not wish to be understood as denying entirely the
 correctness of the common opinion - that a humid
 air under certain circumstances may prove the cause
 of disease but I deny it in the extent to which it has
 been carried - In diseases to which it was originally ~~thought~~
 extremely injurious it has been found the best remedy.
 Every one knows how much it has been deprecated in
 pulmonary consumption - practitioners have always
 chosen for patients afflicted with this disorder - situations
 most distinguished by aridity and equality of tem-
 perature - lately it has been denied that such places
 are peculiarly suited to the disease and even the op-
 -posite condition has been preferred - It is fifty years
^{since} I found a gentleman not less distinguished for his gen-
 -eral abilities than for his eccentricity of character in-
 troduced this innovation into the practice of the times.
 Instead of sending his patients to Bermuda or Madeira
 he was in the habit of ordering them into countries where
 there was much marsh and where intermittent fevers were
 apt to prevail - he usually sent them into the lower
 parts of Detamore or some part of Jersey where the at-
 mosphere was very humid - and his patients if not cu-
 -red were very much benefitted - especially if an attack
 of fever and ague supervened - It is well known

That ~~no~~ part of the world is more subject to pulmonary
 consumption than Great Britain - there is one county however
 (I allude to Lincolnshire) where the inhabitants are not
 at all liable to this disease - Dr Young a physician of ce-
 lebrity has for many years been in the habit of sending
 his patients to this county and has uniformly found
 that they do better than in dry situations Lincolnshire
 is one of the most humid parts of Europe - It has been sta-
 ted that in Holland pulmonary Consumption is entirely
 unknown. ---

Dryness or Aridity of the atmosphere is also not a little fruitful in the production of disease - That - such is the case with regard to the old world cannot be doubted - we read that the atmosphere in the deserts of Africa is so parched as to render it unfit for respiration - by its rapid absorption of moisture - it causes a husky dryness of the throat and fauces and thorax and difficulty of breathing approaching nearly to suffocation - perspiration is carried off from the skin so rapidly that the skin becomes as dry as parchment and feels rough and hot as in hectic fever - Such are the effects of the Sirocca winds - they depend upon its extreme dryness which is caused by the absorption of all its moisture as it passes over the burning sands of the desert - to prevent absolute suffocation - travelers are enforced to hold wet sponges to their mouths and nostrils - so that the vapours may be inhaled with the air - We all know how oppressive a room is when heated with a stove - and that its effects can be prevented by placing on the stove a basin of water - Commonly speaking in this country and other temperate climates - very dry weather is salutary - but this is not owing to the mere quality of dryness so much as an exemption from those poisonous exhalations which are produced by the combined cause of heat and ~~and~~ moisture - There are however some exceptions;

during our summer season - I have known the heat
 itself so great as to prove itself injurious to health
 by drawing off the perspiration - it relaxes the frame -
 and produces debility and languor which eminently
 predispose to disease - of late not a few of our
^{complaints} ~~speculations~~ - by some Medulists have been ascribed -
 to a rarified condition of the air - That on the sum-
 -mit of high mountains respiration becomes laborious and
 painful is universally admitted. not is it less certain --
 that other mischievous effects are produced on the an-
 -imal economy. Persons afflicted with asthma are un-
 -able to live in very high situations and always pre-
 -fer those which are very low (For more of this subject
 read Chapman's Richmond page 215)

pass from the consideration of the sensible quantities of the atmosphere to an investigation of its influence in a depraved or vitiated condition -

It is easy to imagine that the air may become in its properties ^{noxious} by admixture with pernicious articles - That state which is most noxious to health and whose influence is the most extensive - arises from the difference of Marsh exhalations - or what has appropriately been denominated *Evires Miasmatica* - What are these putrefactive exhalations? Notwithstanding the attention which this subject has received - we are still ignorant of their precise nature - examined by the endemical and other tests - the atmosphere which from its effects is known to be loaded with miasmatic - exhibits no sign of their existence but that they elude our search - we have never been ascertained with probable precision the circumstances under which they are given out and that they exist in a subtle and poisonous exhalation from vegetable and animal matter in a state of putrefaction - Nor are we unacquainted with the basis of their action and the morbid affections resulting from their influence - It is said they never arise in any quantity at a temperature

under 80th of Fahrenheit - though they are partially produced
 when the heat is not so great as 80th - there has been many
 instances of rainy seasons not being unhealthy - owing
 to want of sufficient heat to occasion the exhalation
 from a record of the weather kept in this city for 25 years
 it appears that a certain average of temperature - during the
 summer months - is necessary to the production of yellow
 fever - continued rains also operate by covering the surface
 with water - so that the loanefull exhalations cannot es-
 -cape - It is a remark made by those who have paid at-
 -tention to the subject - that during the continuance of
 heavy and protracted rains - low marshy situations are
 perfectly healthy - while those which are more elevated
 are liable to the ordinary diseases resulting from Miasmata
 the reason of this difference is that the one is entirely
 covered with water - the other only moistened or par-
 -tially covered; in the first instance nothing can
 escape - in the second no obstacles is opposed to the
 rise of the exhalations - but rains when not long contin-
 -ued - operate unfavourably in many ways - they wash
 of the green pellicle that forms on the surface of
 stagnant ponds - and which by excluding the sun
 hinders the production of Miasmata - On other acca-
 -sions they act by bringing down the effluvia which

during the hot and dry weather floated in the upper regions of the Atmosphere - This effect is experienced in our own country - but still more on the coast of Barbary and some other parts of the world. Hairs produce disease in another way; by causing cracks and fissures in the dry ground - they open passages by which the Miasmata may escape --- It often happens that while the surface is hard and dry the earth underneath is moist and sometimes contains reservoirs of water - whence as soon as a passage is allowed the exhalations are poured forth. As to the distance to which Miasmata may be transmitted so as to produce the usual effects. nothing accurate has been determined - certain it is they may be wafted to a considerable extent - there can be no doubt of this - since diseases which could only arise from this cause - occur sometimes far from the place of exhalation - Some facts warrant the conclusion that they may be carried to the distance of 8 or 10 miles - Dr Rush used to say they might be carried 30 or 40 miles - but that this may take place it is necessary a current of wind should set strong in that direction - That wind is the vehicle by which they are conveyed - is demonstrated by the fact -

that diseases occasioned by their influence occur most generally in those situations - to which the prevailing winds of the season are directed - thus in the United States - the eastern side of the water courses are often sickly in the summer and autumn - when the opposite shore is entirely exempt from disease and every one knows the winds in these seasons are mostly from the southwest - It is also perfectly well known - that whatever interrupts the current - interrupts also the pestiferous effluvia of which it is the vehicle - hence in those situations which are exposed to the action of Miasmata - rows of trees planted between the dwelling and the source of exhalation - will often rescue the health of the inhabitants - How long the system may remain under the influence of effluvia - without the approach of any morbid symptoms - is a point not completely determined - many days usually elapse - before the accession of the disease tho' it has sometimes occurred in a few hours; and on other occasions has been delayed for ^{several} weeks - Dr. Jackson who wrote on the West India diseases - says he has known the period to be extended as long as six or eight months no one supposes that the Miasmata remains all the time in the body - what is meant is the predisposition induced by their primary operation remains in the system and only waits for an exciting cause - to be raised ~~into~~

into action - and eventuate in disease - The same thing may take place in Hydrophobia - with which the patient is not attacked frequently for a long time - after the bite has been inflicted - Dr. Rush says he has seen the variolous matter to be dormant for 60 days - I have myself witnessed one instance of vaccination when the pustules did not appear for 3 weeks and another in which 14 days elapsed before any signs of disease were visible in the arm in all these cases the predisposition was early created - but no cause had existed sufficiently powerful to excite it into action By moisture it has been said the production of miasmata is favoured - these effects are however destroyed by cold and heavy rains - Habit accustoms the system to their impression and this lessens their influence; we see this exemplified in our own country; new comers into the sickly portions of the southern states are much more liable to diseases of the climate than the inhabitants - As to some forms of disease there appears to be an entire exemption in favour of the native residents - The writers of the East and West Indies remark that if the inhabitants were attacked with any disease of the climate it is much milder - and more manageable than when it attacks foreigners - It is said to be a fact - that the animal system becomes at length so accustomed to the action of

Miasmata - that they constitute one of the stimuli - by which
 life is supported - It is alleged that old persons - who have
 resided all their lives in a Marshy country - soon languish
 and die if removed to a situation where the air is said to
 be more pure and healthy - whether this is the case or not I am
 not prepared to say - from my own experience either to affirm
 or deny - we might however easily suppose that such an event
 could happen and the supposition might be supported by
 analogy - Many stimulants after the system has become ha-
 -bituated to them cannot be laid aside without endangering
 fatal consequences; the truth of this is exemplified in the
 use of spiritous liquors - Opium & Tobacco The influence of
 Marsh miasmata - is widely prevailing - no section of
 the body escapes their attack - and hence there is hard-
 -ly a disease - which may not result from them as its
 source - time will not permit me to go through the
 whole catalogue of them - and I shall notice such
 only as are prominent and interesting - - - - -
 Miasmata may act as the cause of every grade of Bilious-
 -intermittent - Remittent and Continued Fever - nor is it less
 true that they prove the cause of many intestinal diseases
 as Cholera Morbus - Cholera infantinum - Dysentery - Diarrhea
 & Colic - acute and chronic affections of the Liver - Spleen
 and other large glands - may often be referred to similar
 impressions - and we are correct in considering many cuta-
 neous

-neous eruptions which occur in summer - as depend-
 -ing on those unhealthy exhalations - Notwithstanding
 this we are warranted by indisputable evidence in
 concluding so many diseases proceed from one
 common ~~source~~ - or in other words do Miasm
 -ata always exist the same - as regards their nature
 and danger of their power? It is impossible to give
 to the question - in the present condition of our know-
 -ledge - any satisfactory answer - But I cannot help
 believing ^{that} in the process of putrefaction a poison is pro-
 -duced with various degrees of strength - and carrying
 an equal variety in the diseases consequent on
 its action - then it is my opinion that the Miasmata
 are graduated to the different species of Fevers -
 in one degree producing the Intermittent - in a second the
 Remittent or Bilious in a third the Malignant and Pres-
 -titential - Look into the whole compass of Pathology
 and you will find no such variety of effects - pro-
 -ceeding from the same cause - on the contrary you will
 perceive that perfect identity of cause - is always produc-
 -tive of similarity of effect - the Variolous matter inva-
 -riably produces small pox - the matter of syphilis the
 venereal disease - and the contagion of measles the
 same disease - the difference of structure in the

various parts of the body will afford some explanation of the dissimilarity in the nature and character of the complaint - thus miasmata acting on the alimentary canal may produce the various bowel complaints - in contradistinction to those of the blood vessels - but this is no solution in the case of fevers - these are situated in the same part - and if there is perfect identity of cause - should be the same disease but no two have fewer points of similarity - than a milder Intermittent and a Malignant Pseudotubercular fever - both of which are produced by Miasmata - I will next -- make some remarks on the exhalations from the human body - which constitute another great source of disease they have been denominated - Idio Miasmata - they proceed from all the secretions and excretions in a state of putrefaction but the most prolific source is the perspiration so much so is this the case - that we have it on respectable authority - the the linen of a person in perfect health has caused disease in the woman who washed it like most of the external agents - it is the cause of a variety of diseases - but most generally it produces Typhus fever and some weak forms of Dysentery - there is another circumstance Idio Miasmata differs from vegetable exhalations - they never impregnate the volume of the atmosphere - and hence the sphere of their action is

limited - not extending farther than a few feet
 By Haggarth it is stated that at the distance of
 8 feet they have no effect - during my residence
 in Edinburgh - some experiments of Dr Gregory -
 went to establish the same point - a fleet arrived
 in the harbour from abroad - of which many sailors
 were carried to the hospital sick with the Typhus -
 Fever - some medical students interested in the question
 stood at 10 feet from the patients - without experiencing
 any unpleasant consequences But these exhalations
 tho confined to a small extent are very tenacious
 they remain for many months attached to clothes espe-
 -cially cotton and wool and even adhere to brick and
 stone walls - I knew a fever to occur in a hospital
 from this cause three years after the former one
 had disappeared - Walls therefore after exposure to
 infections of this kind should always receive a
 coat of white-wash - which is the best corrective of
 the Miasmata - These never attach themselves to
 ground floors - hence in camps - floors of earth should
 be preferred - the celebrated Count Lacaze introduced
 this improvement - which has since been generally ac-
 -ted upon in the Armies of Europe - During the
 Revolutionary war - those troops were most healthy

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who were lodged on ground floors - In discussing this subject - I will further observe - that Idu Miasmata are more active and wider in their influence in cold than in warm weather - the Typhus fever of camps - Ships and jails &c. generally if not always occur in the winter season - this was experienced both in the revolution and the late War and also in other countries - many of the West-India writers inform us that the disease rarely occurs in their climate - the reason is plain and what must occur to every one - in hot weather there is a free and open ventilation of the rooms of the sick - but when it is cold - the doors - windows and other apertures are tightly closed - and a concentration of the effluvia is the necessary consequence - hence they act with increased force and must accordingly spread the disease more extensively. Beside the causes of Atmospheric contamination there are many other causes of Disease - which might easily be pointed out - of these such as might be most worthy of our attention shall receive it - - - - -

Physiognomy of Disease

My plan of treating on pathology - differs from the course commonly pursued - I have confined myself to the causes of disease - and have deferred the consideration of the signs & seats effects &c - untill I shall come to the history of particular complaints - By so doing I shall make the whole more interesting and exhibit the subject in a more impressive light - Next then I am to proceed to the treatment of diseases - as a preliminary inquiry however - I shall detain you a few minutes - while I point out the best means of ascertaining their existence - What is denominated Medical Physiognomy is the most important of the means alluded to - Of all men that ever lived Hippocrates possessed the most profound knowledge of this department of our science even to the present time he has maintained an univalled eminence in this respect - The discovery of the disorder of Puerias merely from inspecting the countenance of that prince - after all the other physicians of Greece had ~~failed~~ been baffled in their attempts to ascertain it - is alone sufficient to show that he must have been possessed of consummate accuracy the term Physiognomy as applied to Medicine - in-

cludes

-cludes much more than the expression of or the appearance of the countenance - it embraces all the exterior of the sick as far as this can assist in ascertaining the nature and consideration of the disease. The circumstances and parts which chiefly demand our attention are the Countenance - the Tongue - the Teeth - the Respiration - the Excrements - the Decubitus or posture - and the appearance of the extremities - First of the Countenance there are several diseases - the existence of which an experienced Physician may discover from the state of the countenance - such as jaundice - Dropsy - P^htisis pulmonalis - confirmed Diarrhea - and all those which are denominated Exanthemata - pestilential fever in the advanced stages may be recognised in the same way - jaundice besides the yellow surface of the body - is marked by a hebetude or numbness of the Intellectual faculties which produces an expression of the countenance bordering on moroseness - this expression of the countenance is very apt to accompany affections of the Liver the Aetic countenance of P^htisis pulmonalis is known to every one - there is a circular florid spot on the cheek - a glassy brightness of the tunica conjunctiva - a vivid sparkling eye - and lips of a lively ruby colour - these seldom appear until the disease has advanced some distance in its course - the Aetic flush is sometimes perceptible in peripneumony

The countenance which accompanies petilential fever is
 of a different description - a red diffused or muddy eye
 a contracted frowning brow - a dusky livid colour
 of the skin - are some of the appearances - In fatal ca-
 ses of our winter Epidemics - sometimes from the com-
 mencement generally however in the advanced stages
 there is a peculiar expression of the countenance
 more like that of Bronze than a livid or leaden co-
 -lour - the skin of the face is polished and ~~looks~~ as if it
 were glazed - these symptoms are the prelude to death
 when the features are greatly changed from their heal-
 -thy aspect - more of less danger is to be apprehended
 the most common observer will remark that ascertaining
 (he must be very ill - he looks so unlike himself)
 the natural countenance is frequently the sign of re-
 -turning health The Hippocratic face or countenance
 is known to any one when fully formed - it is mar-
 -ked by the following circumstances viz - a sharp non
 hollow eye - sunken temples - cold contracted ears
 with the lobes inverted - the skin about the forehead
 hard - stretched and dry - and the colour of the face
 pale - dark - livid or of a leaden cast - these appearances
 exist in different degrees - according to the advancement of
 the disease - such a countenance is almost always
 a fatal sign - less so certainly in Diarrhea than

in the diseases— even here however it is a mark of great danger
 the same countenance is sometimes caused by an attack of
 Cholera Morbus in a few hours - but most commonly it is ob-
 served in those cases - where there is great emaciation from
 particular disease - It is generally accompanied with An-
 -gus Adumata or curved nails so often to be seen in consump-
 -tive patients - the lips hanging relaxed and cold are always
 ominous of a high degree of danger - The appearance of the
 eyes in sickness are very various - if says Hippocrates they
 avoid the light or waver involuntary or are drawn on one
 side or of an unequal size or are red or the whites - or have
 dark veins on their surface - or are separated elevated - or have
 irregular motions - or are thrust out from their orbits - or are
 rolling - or squallid without brightness all these are very ominous
 of a fatal event - to these may be added the dilatation
 of the pupil on exposure to light - involuntary rolling of the
 eye balls - and sleeping with the eyes only partially clo-
 -sed - a preternatural contraction of the pupil - is always
 dangerous - a dilated pupil denotes compressed brain - a
 contracted one points out the actual existence or the
 approach of an inflammation of that organ - sleeping with
 the eyelids only partially closed is symptomatic of a
 diseased condition of the alimentary canal - in chil-
 -dren it occurs in consequence of violent purging - and
 it is then not so seriously alarming - a contracted

forehead conjoined with the above indications is an unpleasant sign - sparkling and distended eyes indicate delirium - Hippocrates says when the patient sees every thing red - or perceives sparks of fire floating before his eyes - and flashes like lightning - Hemorrhage from the head is commonly indicated - as involuntary weeping is an unfavourable sign - so is voluntary weeping a favourable one - there is an opposite state of the countenance consisting of a kind of sarcastic smile - the Ritus Sardonicus or convulsed laughter is a symptom of bad import it has been supposed to be expressive of inflammation of the Diaphragm - it is almost always symptomatic of approaching delirium - and is associated with inflammation of the stomach - as was fully exemplified in the yellow fever - - - - -

Second of the Tongue - this was said by Hippocrates to be of the same colour with the prevailing humors the pale or green tongue he thought was occasioned by bile - notwithstanding the rejection of the humoral pathology there seems to be more meaning in these remarks than in many which are the offspring of Modern times - the tongue is an excellent index of the state of the Hepatic system and alimentary canal - yellow or green - it is almost always

indicative of an attack of bilious fever disease - in inflammatory affections it is generally white - the livid dark & chopped tongue is a symptom of great danger - sometimes it appears like raw beef as if the skin was entirely removed - this also is an unfavourable occurrence - tremors of the tongue which at the same time is projected out of the mouth are a dangerous sign - and are connected with cold sweats relaxation of the body - black vomit &c The natural appearance of the tongue in febrile diseases is indicative of imminent danger - but when it clears after being foul when it becomes moist after being dry and steady from a trembling condition - it is symptomatic of a favourable change - there is a remarkable difference between the appearance of the tongue in the diseases of the lungs and that which is exhibited in alimentary complaints When the pulmonary organs are affected it continues clean and sometimes becomes more so than natural - in complaints of the Stomach and Bowels on the contrary it is generally loaded and incrustated with viscid matter This circumstance will assist as in distinguishing between the diseases of the two parts - It is worthy of remark that in hectic fever from abscess in the lungs or elsewhere - the tongue is perfectly clean and florid whereas in ordinary fevers of the same grade as in intermittent

-tents. it has a perfectly different aspect. here there is a criterion between the irregular intermittents from common causes - and the Hectic fever - both are attended with chills - exacerbations of heat - and a copious perspiration - and it is important to distinguish one from the other. where the fever is very obstinate - the tongue is sometimes exquisitely polished -----

Third of the Teeth in fever - when they become foul and are of a yellow green or dark colour they indicate the presence of malignant Typhus action in the system or great disturbance of the chylopoietic viscera and Brain - Grating of the teeth is also a sign of visceral disease unless the patient has been in the habit of doing the same in health Grinding or Grashing of the teeth is often the harbinger of approaching Delirium -----

Fourth of Respiration all unnatural respiration is an unpleasant symptom when laborious accompanied with heaving of the shoulders. it is expressive of the utmost danger - quick respiration resembling the flicking of the pulse is always to be dreaded - if frequent and small it indicates inflammation in the parts employed in breathing. we may see this confirmed in peripneumony - as often as in

- inflammation of the lungs or pleura occurs the respiration becomes more frequent and confused - In this disease we hail as a favourable symptom one ability in the patient to make a full respiration - before he could do this the inflammation must have subsided - an unequal respiration with sighing - is unfavourable as it indicates difficult passage of the blood through the lungs - and no inconsiderable danger from its defective oxygenation or decarbonization - Hippocrates believed that respiration was a symptom of approaching death - when slow and for extended when oppressed - when obscure and hardly visible - or when twice drawn without an intermission - In acute diseases - where the stomach is affected - hiccough is a sign of great danger - but it is not always so in nervous affections - In Typhus fever I have seen it from the beginning and yet the patient recovered - In all cases where the breathing is accompanied with considerable motion of the abdomen - we may conclude there is no little danger in the case -

Fifth Expectoration affords another prognostic - when the mucus is discharged from the lungs with facility we may consider it as auspicious - if of a yellow colour - in the beginning of pleurisy - it is a good sign - when the expectoration is dark and bloody and respiration difficult the danger is imminent - This was a common

symptoms in the last winter epidemics - and indicated the worst species of this disease - bloody expectoration in common pleurisy is not to be dreaded - when it is light and frothy little relief is afforded - but no increase of danger is pointed out - A discharge of purulent matter is always alarming - as it indicates the existence of an abscess in the lungs -

5th excrementitious discharges - there are faeces - urine and perspiration - as regards the faeces it was remarked by Hippocrates - that when they are yellow - hard of some consistence - without any offensive odour - corresponding to the quantity of ingesta - and discharged at the regular period - they are a sign that the system is in a healthy condition - but they are liable to many derangements - First watery evacuations are a sign of great relaxation and debility or of a high degree of irritation in the intestines ^{very dangerous in children}

Second pybulous stools with slime and blood - indicate the existence of much inflammation ^{& spasm} as in Dysentery Third deep green yellow or black tarlike stools always denote a preternatural accumulation of bile in the bowels green and black also denote much acidity. The black I believe is owing to the union between the acid and soda of the bile in the alimentary canal ^{the face}

a watery discharge in children with a pink ancol on the navel
fatal

The green colour most commonly arises from the action of
 the air upon the discharge - it is worthy of remark
 that in children the stools are most commonly yellow - but
 if examined soon afterwards they will be found to have
 changed to a grass green Fourth grey or ash coloured
 stools denote a deficiency of bile - when the excrements
~~are mixed with food~~ ^{are mixed with food} it is a sign of imperfect diges-
 tion or great irritation of the alimentary canal - when
 the stomach is in a state of irritation then its surface is
 unable to bear the contact of alimentary articles - and they
 are thrust out through the pylorus in an indigested state
 + As regards urine it is much less attended to in modern times
 than formerly - it afforded indications greatly confided in
 by Hippocrates and the older physicians - considering how
 variously this secretion is affected by different complaints
 it is improper to overlook it - in forming an estimate
 of the nature of the disease and of the best method of effec-
 -ting a cure - By a late writer (Blackall) it has been shown
 that the urine in dropsical persons at least - is an ^{important} ~~interesting~~
 test of the different states of the disorder - why modern
 physicians inspect the alvine evacuations and are heedless of
 the urine is neither explicable nor capable of vindication
 you should bear in mind that by the ancients who were
 univalled for precision of observation - this secretion
 as well in children the stools look as
 if covered deepened upon it there is
 danger of Hydrocephalus

was regarded as one of the principle indications
 of the nature of disease First the urine in excess and
 of a pale colour denotes relaxation of the kidneys
 or a serious disturbance of the nervous system
 Second Deficient in quantity denotes high irritation
 of the kidneys or impaired absorption - a strangury
 occurring in the commencement of acute disease is
 inauspicious and denotes a high degree of irritation
 inflammation about the urinary organs - and as
 Dr Rush termed it pyrostatic excitement - but
 in the advanced stage of acute disease strangury
 is one of the most favourable symptoms that can
 occur Third when the urine is loaded with
 saccharine matter or has a milky appearance it
 indicates a diseased state of the chylopoietic vis-
 -cera particularly the stomach - Much is to be gath-
 -ered from the urine in gravelly and gouty affections
 whenever it affords a great quantity of red ^{or pink} precipitate
 we may judge there is an excess of uric acid - thus
 at once we have afforded us the means of manage-
 -ment ^{by the alkalies} Fourth copious discharges of urine tho generally
 favourable at the crisis of disease - are not always so
 they generally occur in convalescents from Rheumatism
 and Gout - but these copious discharges are indica-
 -tions of the utmost danger in pneumonic affections
 white precipitates ^{or phosphates} shew the alkalies to be present

and diseases of the brain - Whenever they occur in Hydrocephalus - premitis - Malaria &c - we may prepare for an increase of the disease if not the death of the patient. They are not a sign of much danger in the nervous affections as Hysteria &c this is a circumstance you should always bear in mind.

As regards perspiration we have afforded us an indication of tolerable accuracy it is said by Hippocrates that an universal sweat at the crisis of acute disease is always favourable - but this is the case only when the perspiration is accompanied with warmth - softness of the skin - and some colour or suffusion of the surface - cold sweats and palid skin are invariably alarming - the same may be said of partial sweats - When these break out early in fever - and especially if they appear about the head and neck - they indicate a long and protracted attack of disease - but if they occur in the advanced stage they are still more to be dreaded - nothing is more to be dreaded or more alarming than a cold clammy forehead ^{or wrists} - it is said by those who have paid attention to the subject that acid and sour perspiration is ^{the attendt} a favourable sign and when ^{typhoid malignant fever} ~~palid and~~ cadaverous it is otherwise - I have said that a general perspiration accompanied with a glow on the surface is favourable in ^{the} acute diseases - this is true ^{as re-}gards

- guards the milder fevers - but not in those of a malignant nature - it was said by Dr. Park that in many cases of yellow fever - profuse sweating from the commencement denoted an unfavourable termination
 Seventh of Decubitus a posture - if the sick can only lay on one side it is a bad ^{and a sign of inflammation of some of the viscera} symptom if on neither still worse - it is alarming when they assume any posture different from that they assume in health - restlessness and tossing of the hands and feet are signs of great danger - if the patient lies on his belly - contrary to his usual custom Detrimen or severe pain in the bowels is indicated - but the worst symptom of all is when he lies on his back - ^{on his back - this is a sign of cerebral inflammation} sliding down towards the foot of the bed his knees bent to one side or the other - and his mouth open during sleep - ^{playfully death} this posture indicates almost certain death - the same may be said of a constant and urgent desire to be removed from one bed to another or from one chamber to another -

Eighth of the Extremities - an unequal temperature of the extremities is unfavourable - cold feet are always alarming - tho' not so much so as cold ^{wrists} hands - the former is sometimes constitutional with ^{particular} persons - enquiries to that point should be made cold wrists and warm hands are always dangerous
 where sweating does not destroy the disease you may prepare for a long attack sweat - dropped head - the pain of vapour
 good

generally fatal - nothing is more frightfull in sickness
 than cold breath - ~~when this occurred I never knew recovery~~
 chilliness continuing longer than usual - at the commencement
 of fevers or other complaints - denotes considerable danger
 so also do intense sensations of heat - in the advanced
 stages - especially if they are internal - as in the stomach
 bowels and lungs - it is a remark of Hippocrates that red-
 -ness in the palms of the hands and feet - is a bad omen
 in violent diseases - the truth of this remark was fully
 exemplified in the yellow fever of this city - as to the
 motion of the hands Hippocrates has made the following ^{remark}
 when (says he) in acute fever or inflammation of the lungs
 or phrenitis or pain in the head - patients put their hands
 out before their face and hunt after or catch at any
 thing in the air and gather moulds or pieces of sticks or pease
 to do so - and pick of the nap of the bed clothes - and pull
 straw out of the wall - it is bad and indicates a danger-
 -ous condition of the disease - ^{cerebral affection} lividness of the nails and
 fingers is a fatal symptom when it occurs in the advan-
 -ced state of acute disease and continued fevers - it
 marks a torpid circulation and an imperfect decarbonization
 of the blood - even tho^t the disease is weak - as in a gen-
 -tle inflammatory fever from exposure to cold - if this
 symptom present itself at a time when others indicate no danger

I had a case in which the nails appeared livid tho? in other respects the patient appeared free from danger - I prognosticated the worst and at the expiration of the third day after he died - Invariably as far as my observations extend this symptom is the harbinger of death -

Of the Voice answer in a sharp querulous tone are bad so is any great deviation from the natural voice a fierce answer from a mild man says Hippocrates is always bad - when a patient who is naturally taciturn talks much or tho' naturally talkative is silent - it is an unfavourable sign - it indicates incipient delirium or a state of the brain seriously affected - a trembling voice is unpleasant a loss of it ^{except in recent cataract} more so - while the voice remains natural - hope exists - and amidst the most alarming symptoms affords encouragement a catching or trembling of the muscles or what is called subultus tendinum is always unfavourable - and argues a tendency to Typhus and Nervous affections -

Unguis adunca bad

subultus tendinum bad very - a spasmodic action of the tendons so as to cover the arteries as the radial - in a certain degree from my observations it occurs in an autumnal bilious epidemic

Condition of the Senses

Much has been said which has some bearing on this point - and it now remains to point out a few circumstances of a more particular nature - First of vision when this is impaired it is an alarming symptom and when the patient is totally blind we may prognosticate speedy death this occurs principally in *Hydrocephalus internus* and arises from oppression of the brain especially about the optic nerve ^{origin of} Second deafness is scarcely less alarming - if it takes place in violent diseases - but in mild cases as in catarrh it indicates no danger - Tinnitus Aurium and the hearing of other bad sounds or noises - are unfavourable symptoms they indicate the existence or near approach of some affection of the Brain - the reverse or where the hearing is natural is generally a favourable sign tho' Dr Rush has sometimes observed it to be the contrary - Third a taste very much depraved ^{rather both denote tubercle} is unfavourable - extreme acidity for food especially for animal food - in the commencement of violent diseases is still worse - very few recoveries happen under such circumstances - in the close of fever - the recovery of the appetite is among the indications of returning health and this is particularly the case if a patient shows a desire for tobacco - Fourth the sensations are in many cases just indications - insensibility to heat - cold - blisters - I have seen double vision to arise from accumulation of bile in the stomach ditto of worms

and other instants is a ^{very} bad sign - but preternatural irritability not less so - when the patient is troubled with with startling - tremors from slight causes - intolerance of light or of cold air he is in a dangerous condition - both these states are met with in Nervous fever ^{and gastritis} - the restoration of sensation if not to sudden is ^{very} favourable - this is usually expressed by the patients ~~expressing~~ ^{expressing} pain when moved in bed - by aches in the joints and different parts of the body and legs - the appearance of redness in places where blisters and sinapisms have been applied - also by picking the nose - being much more irritable &c - - - - -

Condition of the Mind much may be collected from this source - Delirium in fever is always an unpleasant circumstance - but less so when lively and violent - than when accompanied with indistinct muttering and heaving sighs - there is often a partial alienation of the mind not amounting to Delirium - which is indicative of great danger - this is generally shewn in the want of solicitude with regard to family and friends - the patient does not inquire into his domestic affairs and feels no interest in the news of the day - a contrary state of mind is favourable

frequent inquiries about the probable termination of the disease - tenderness to those about him - politeness to his physician - interest in the concerns of life - questions relative to his private concerns and those of his friends - are signs that the patient is doing well - a mind gloomy from the commencement foreboding a fatal issue - is one of the worst symptoms that can occur - (the love of life is one of the stimuli necessary to the vital actions) - petulant temper in the advanced stage of the complaint is favourable - whereas a mild gentle deportment is sometimes the contrary.

Condition of the Blood as you all know this affords signs of disease - in which we greatly depend. All these arise from the different degrees of its coagulability - in the physiological part of the course - I remarked that it was ascertained by Mr Hewson and concurred in by Mr Hunter - that the action of the vascular system and the disposition to coagulate are in an inverse proportion - but at the same time I showed that the experiments of Mr Hay which were repeated by Mr Haighton go to prove entirely the reverse - the result is precisely that which would have been anticipated - as the process of coagulation is vital and in a great measure independent of chemical and mechanical

- Charical agency - it must be speedily and completely effected - when the system is in ~~complete~~ full health - diseased action has a tendency to subdue the resources of vitality - and hence in proportion to the morbid violence of the arteries - is the difficulty of coagulation the truth of this is established by the fact - that in severe and malignant diseases - the blood is hardly coagulable - Dissolved Blood - in this the constituent parts seem broken and commingled - as if beaten together by mechanical force - it occurs when the vital energies are enfeebled - and denotes the greatest danger - it is most commonly seen in malignant fevers - and often in our winter epidemics - I never knew of recovery when this condition of the blood was seen the worst resemblance of the blood is when it resembles molasses and water - but when a part only of the blood is dissolved - and the rest partly coagulated ^{with some ridge on the surface} - there still exists some hope of a cure - I have said it never occurs but in reduced states of the system - it often happens in puerory - and to a less extent in some of the characteristic diseases - when this appearance of the blood is observable - no matter what may be the case the lancet should always be laid aside - and the system supported by cordial and

very freely given

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stimulant medicines - I am aware that a different doctrine is held by some persons - but my experience and that of others - in whom I have the greatest confidence - goes to vindicate the opinion which I have advanced - a different degree of coagulability in the blood - is exhibited in cases - where part only is dissolved - the appearance in this instance is like the ~~coctura~~ ^{coctura} cornium - a washing of flesh and the blood looks as if it had been shaken in a bowl - it occurs in the last stages of acute diseases - and calls for a change in the practice - The next in degree of danger - is blood with a serum of a clear red - a green or yellow colour - it is met with in acute Billious fevers - of more than ordinary violence - but tho' it indicates danger - yet recovery is often effected - still less alarming are those cases ~~where~~ in which the serum of the blood is yellow - with ^{crapaculentum} ~~crapaculentum~~ floating in it - this appearance is observed in mild bilious fevers - and affections of the liver - ^{jaundice} ~~jaundice~~ - the blood of a scarlet colour in which there is no separation into crapaculentum and serum is the next in danger - by some it is supposed to indicate a morbid action - second only to that which produces the dissolved blood - but this is not the fact - it is often met with when the phlogistic diathesis prevails - ^{only} ~~only~~ in old persons - and it also occurs in the young and robust in whom the vigour of life is ^{so} great - so as to approach the confines of disease - it may be seen in person when bloodletting is

performed in individuals who have been previous-
 -ly much heated - and excited by exercise or other causes
 the same appearance is visible in the early stage of
 phlegmasia - particularly in Rheumatism and pleuri-
 -sy - ^{Size of Buff} is one of the most favourable ^{signs}
 - ^{of morbid} appearances which the blood can assume in dis-
 -ease - it indicates an open undisguised attack of ^{common} in-
 -flammation and calls for resection - exceptions how-
 -ever exist - blood of this kind may be found in cer-
 -tain individuals at all times tho' in a state of perfect
 health - such persons are always distinguished by a hard
 corded pulse - the same appearance (as you all know)
 is exhibited by the blood of pregnant women
 Heberden observes it in putrid Erysipelas - and Fothergill remarks that it
 is found in the last stage of Cynanche Maligna - It was very common in
 the pneumonic form of the winter Epidemics - and I have much reason to
 believe - that it is associated with all complaints of the pulmonary organs
 whether acute or chronic - this appearance of the blood is not a
 little affected by several circumstances - it is more apt to reside in
 vessels of one figure than in those of another - the blood is also more apt
 to assume the buff coat - if the aperture by which it is drawn be
 large - the blood circulating in different parts of the body - is different
 in this respect - in some cases when taken from the arm. it is ^{becomes buff} ^{but so in metal} ^{on the surface}
 while that drawn from other parts is not - a ^{very} appearance must
 not be taken for an invariable sign of inflammation - and also
 it should not be trusted as the guide in disease
 a ^{buff} ^{red} surface shows a high degree of Phleg-

The Pulse

The pulse has long been celebrated as an indication in disease - and is justly entitled to our fullest confidence - but it is obvious that it could not afford a correct prognosis previous to the discovery of the circulation - hence it was seriously noticed by Hippocrates - who meant by it little more than the troubling of an inflamed part - by Celsus who flourished many centuries afterwards - some advances were made towards a more accurate knowledge of the pulse - but so little was known with respect to it - that he named it *Festina fallacissima* - the most fallacious test - To Galen the credit is due of ^{directing} ~~drawing~~ attention to this indication - and to him is due the credit of the most correct information of it - his treatise on the pulse is voluminous and contains the minute divisions - which even at the present day are so familiar to you all - but this minuteness constitutes the chief defect of his work - as it ~~seems~~ rather to embarrass and perplex - than to guide us in our investigations - As might be supposed the subject has not been neglected in modern times on the contrary it has engaged the attention of the ablest men our science has produced - but as is usual in matters of high interest - there has been no slender difference of opinion as regards almost every part of the subject - Some writers maintain that the pulse is the only true criterion of the condition and fluctuation of the disease - others on the

contrary are disposed to depreciate its utility - and even that it is only subservient to the other circumstances - and should never be trusted to the exclusion of the numerous signs already indicated so particularly - as in most controversies - the truth may be found in the middle - In the ensuing discussion I shall first treat of the natural pulse.

The natural pulse

In a healthy state the pulse is soft and vigorous - free from all source of resistance - and the return of the strokes is at equal intervals - by age - conformably to the best calculations - the pulse beats at first - about 140 strokes in a minute - and at the end of the first year 120 - at the expiration of the second year ^{about} 100 - at the close of the third year it averages 90 - from this period it gradually becomes slower - till the age of 12 - when it assumes the adult standard - or about seventy five strokes in a minute - after the meridian of life it is somewhat less frequent and in old age undergoes three changes - it is much slower sometimes - not more than 40 - and sometimes (according to Haller) as low as 20 - it is also fuller and stronger - more irregular and sometimes intermittent these two last changes should be carefully recollected in practice - because in young men with such

a pulse we should bleed freely - if we do not bear in mind - that it is irregular and intercurrent we shall often experience unnecessary solicitude - The second cause which influences the pulse is sex = the pulse of women is quicker than that of men - and the difference by some has been computed at the amount of 10 strokes to a minute - the greater mobility and irritability of the female sex would readily convince us - that such might be the case = but from my own observations - I should decide that the difference is not so great as first mentioned - the fact is related on the authority of Keper and Faulkland = It is worthy of recollection - that certain states of the female have great influence on the pulse = thus we always find it more active and full during pregnancy than at other times - it is also very much in the same condition just before the menstrual effort = the pulse is varied according to the temperaments it is commonly more active and quick in the sanguineous temperament - has the same sort of mobility or irritability as is incident to women = it is influenced by the stature this has been ascertained by actual experiments - particularly of Brian Robinson - from these it appears that in a man of six feet - the pulse is 10 strokes in a minute slower than in persons of the ordinary height - this is confirmed by Senac and Falckner = in Dwarfs on the

contrary the pulse is from 90 to 100 - while in Giants (ac-
 -cording to Haller) it is from 50 to 60. = The pulse is modified
 by the positions of the body - it is uniformly quicker by
 several strokes - in an erect posture - is much slower when
 the person is on his back - it is 63 or 64 = sitting it is 68 = and
 standing it is 75 in a minute = this we have on the authority
 of Brian Robinson = If we were not acquainted with
 these circumstances we should often be deceived - Not
 a little influence is exerted on the pulse by sleep - as this
 abstracts most of the stimulus ^{which excites} of the body and mind - there
 is reason to believe that such might be the case - accor-
 -ding to experiments it amounts to several strokes in a
 minute - the fact has been denied by some and Haller
 among them - it is however too well attested to be doubted
 when the pulse is quicker in sleep - we attribute it to the
 heat of the chamber or bed clothes or the mind of the person
 disturbed by unpleasant dreams - Darkness and light
 have influence on the pulse - it is always slower in the dark
 and more vigorous and accelerated when the light is admitted -
 this should be attended to in the management of diseases
 when we wish to subdue the vigour of the circulation - we
 should always close the window shutters - The pulse is
 altered by emotion - it has been found by actual exper-
 -iment - that no species of stimulus has so great an effect

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as exercise - the pulse of a person walking at the rate of 4 miles an hour - is augmented to 120 in a minute - and running it is still more so - Diet influences it - after every meal it is quicker tho' much depends on the nature of the food and drink as we should conjecture animal food increases its frequency more than vegetable - and wine more than aliment - and ardent spirits most of all - the pulse is at first ~~reduced~~^{raised} - but if this is long continued - debility ensues - an accumulation of excitability takes place - you all know the pulse is influenced by medicines - Temperature exerts a considerable influence on it - the effects of heat in raising the pulse are universally admitted - by sitting before the fire the difference of 4 or 10 strokes is at once perceptible - the pulse is more frequent in summer than in winter - and more so in hot than in cold climates - in the Laplander (according to Haller) it is not more than 40 - in the inhabitants of the torrid Zone as for instance in the West Indies - it amounts to 100 - cold depresses the pulse - but much depends on the manner of its application - if suddenly applied as by dashing cold water on the person - or by immersion in a cold bath - it augments the vigour - The pulse is altered by different states of society - it is found by experiment to be quicker in the civilized man than in the savage - and more so in the cultivated gentleman than in the rude and vulgar - as a person becomes refined - moral and

intelligent so his physical susceptibilities are developed & his excitability is greater - so is his pulse increased in vigour and velocity. - - - - -

The condition of the mind is another of the causes that influence the pulse - it is greatly excited by intense thought and deep solicitude - of the passions Anger - Hope Joy &c accelerate it and increase its force and fullness - there are others of a contrary nature - as Fear Grief &c which have an opposite effect - hence it is important to observe silence in a sick room - the time of day exerts great influence - it is universally conceded that the pulse is liable to vicissitudes at different periods of the day - with regard to these periods writers are not agreed - Cullen says it is more frequent at noon - and in the evening - similar in this respect to hectic fever - a more general opinion is that it is slowest in the morning - increased from that time till the middle of the day - then gradually diminished in frequency and in the evening again augmented - this doctrine is founded chiefly on the authority of Brian Robinson and Falckner - lately it has been asserted by an ingenious writer - that the pulse is quicker in the morning and gradually diminished until night - he ascribes it to a diurnal revolution of the body - in which every function is less perfectly performed

at the close of the day - particularly those of respiration digestion and circulation - according to the Chemist there is less air respired at night - than in the morning - which is proved by the fact that carbonic acid gas is produced He asserts that digestion is imperfectly carried on - this he proves by the fact - that all persons suffer more from supper than from any other meal - The Trainers and Physicians in England always deny supper to those individuals under their direction as they become debilitated instead of invigorated by this manner of living - To prove that the pulse is more frequent in the he performed a series of experiments - which seem to have been made with accuracy - I hope as the subject is important you will engage in the inquiry - and by so doing promote your own knowledge - and assist in the promotion of your profession - To the preceding causes which may be considered as the regular ones - may be added some others - those arising from idiosyncrasy and peculiarity of constitution - in some individuals the pulse is permanently slow or quick - slender or feeble - vigorous or intense without any detriment to the health - I am acquainted with a gentleman who has attained a very great age whose pulse was never below 100 - and I knew a lady who is now dead in whom I could never count more than 40 - The throbbing or intermittent pulse is by no means rare - those peculiarities should never be neglected - - - - -

Morbid pulse - I have now detailed to you many of the causes which influence the pulse - but the effect of the whole of these in health - is only to increase it in vigour and velocity - we are now to consider it in a morbid condition - you will know the vascular system is a whole a unit - made up of parts closely connected by sympathy - as it extends over the whole body - penetrating the most secret recesses - it is exposed to every morbid impression - external and internal - and participates with every diseased action of the system - whether in the vessels or in the sections of the body - The Blood vessels being impeded in almost every disease - it follows that the pulse varies accordingly - it is altered by every febrile action - sometimes wholly different from a natural condition above 100 pulses were mentioned by Galen - and extended farther by Solano - and more recently by some French writers - there is no doubt a foundation for many of these pulses - but the distinctions are so slight - that they rather embarrass than guide us in the management of disease - The following arrangement of the pulses will embrace all that is necessary - the first kind of pulse in the language of Galen - who was copied by Rush - is the *lynocha* - it is full frequent and tense - with some hardness - it was in the *lynocha* pulse of Cullen - and in the *phlegmasia*

especially Rheumatism and Pleurisy - the second is called the
 Lymphatic and is full round and vigorous and frequent - it differs
 from the preceding in being softer - more open - rounder and of
 large volume - this is met with in diseases of moderate infla-
 -mation - particularly common autumnal fevers - the third is Lym-
 -phatic - it is quick tense sometimes vibrating - always shodded
 imparting to the touch the feeling of an elastic tube - we find
 this pulse in the phlegmasiae particularly gout - Rheumatism
 and pulmonary consumption - the fourth is the Typhoid - this
 is quick with some degree of tension - and small contracted
 volume - it occurs mostly in reduced and debilitated conditions
 of the body especially in Hectic fever - the fifth is the Typhus
 this is small and sometimes trembling and readily compressible
 it is found in those diseases - which are distinguished by its
 title - viz. the Typhus claps - jail and Hospital fevers &c - the
 preceding are commonly observed in the practice of Medicine and
 may be called the five original or primary pulses - they are of-
 -ten blended or modified in several ways - too numerous to
 be mentioned the most frequently to be met with is one of
 the Lymphatic - like this it is soft - voluminous - full and round
 without tension and yielding at once to the finger - as if
 the artery was filled with matter more compressible than
 blood - this is an insidious pulse - it calls apparently
 for venesection and evacuations - when in fact the indica-
 tion

tion is opposite - it often occurs in pestilential fevers and in our late winter epidemics - the loss of a small quantity of blood in such cases sinks the pulse directly and the powers of vitality - the most important variation remains to be stated - it takes place in an oppressed condition - and sometimes is like the pulse of exhaustion - we may distinguish them by the following - 1st The oppressive pulse occurs only in the early stage of disease - - - 2nd it is only found in Malignant fevers or other disorders of great violence. 3rd it is always to be met with in inflamed conditions of the alimentary canal and Brain it is commonly slower than the pulse of debility - and sometimes when the oppression is excessive - does not beat more than 30 or 40 in a minute - 4th most generally it imparts a sensation of tenderness or jerking or intermits or throbs or manifests some other wide deviation from nature - the pulse of debility is never marked by this circumstance So Sydenham is due the credit of first pointing out the difference between the oppressed and exhausted pulse - but the claims of Dr Rush in calling to it the attention of practitioners are not less strong upon our applause - This alone had that great man never done more for medical science ought for ever to entitle him to our warmest gratitude - - as it is of great consequence that we should draw correct conclusions from the pulse - I will give a few directions

-tions for its examination 1st Never in dangerous cases - feel
 the pulse on first entering the room - the sight of a physi-
 -cian frequently accelerates the pulse - 2^d Always remember
 to apply more than one finger to the pulse - by mul-
 -tiplying the fingers we broaden the surface of sensa-
 -tion 3^d Never hastily draw conclusions from the pulse -
 feel it again and again for fifteen minutes at a time
 examine both arms - before examining the pulse let the
 arm be placed in such a situation that it may be ex-
 -tremely free from all pressure - often however the pulse
 is deceptive - the arteries do not always sympathise
 with the diseased part - and other variations arise from
 the action of causes - natural and acquired - It is most
 apt to lead us astray in diseases of the alimentary canal
 of the Brain and some local affections as ophthalmia
 but this does not often happen and on the whole the pulse with-
 out doubt affords the most accurate indications - like the coun-
 -tenance which is liable to fluctuations and variations -
 which occasionally detract from its utility - but on this
 account no more than the uriner should we totally ab-
 -andon it and trust to signs more precarious and less worthy our attention
 In all cases we should not draw conclusions from the pulse alone
 but also examine the excrementitious discharges the state of the res-
 -piration - expectoration and other signs which I have de-
 -tailed with so much particularity - - - - -

With this I conclude all observations preliminary
to the practice of Physic - I should have treated
also on Therapeutics - but a work which I have
lately published contains whatever I should say
on the subject. And for more particular infor-
-mation I refer you to the professor of Materia Med-
-ica & pro. R. G. Finis

The Practice of Physic

I am now to commence the practice of physic - this is a most interesting and important subject - it is the point to which all our inquiries tend - the first question which occurs to our mind is - how shall we arrange disease? I will not occupy your time in relating the various modes of classification which abound in the writings of different authors - each of them has its own share of merit - but that of Cullen is least objectionable - ^{perhaps for the best} aware of the success in the classification of diseases - the celebrated Brown boldly advanced a system of his own - and disowned Nosology altogether - His classification is characterized by extreme simplicity - arranging all diseases under the head of ^{nosology has an opposite to this effect - therefore he was not the first who taught it} ~~asthenia~~ and ~~lathenia~~ - Notwithstanding the great credit which this system attained it proposes very little claim to your attention - Had I tell you that one of our ^{own} ~~schools~~ ^{very best} has furnished an attempt at this extreme simplicity of arrangement of diseases - as a necessary part of this plan is to put down Nosology - candour compels us to acknowledge that Nosology abounds in absurdities - but reasoning upon the subject it is not fair to draw all our ^{our own bad reasoning on every subject} ~~conclusions~~ from its abuses - What then is the best mode of arranging diseases? to answer is difficult - but that some arrangement is necessary seems not to be doubted - on Nosology - referred to Good

It has occurred to me that the best mode of arranging diseases is as they present themselves in the different ^{parts} systems of the body - this arrangement will no doubt admit of many objections - ^{but the least objection} nevertheless I shall adopt it in my present course of lectures - By a system ~~Puccan~~ ^{or parts} ~~economy~~ - they are ten in number as follows - to wit =

- 1st The Circulatory ----- consisting of the Heart and blood vessels
- 2nd " Respiratory ----- Lungs -----
- 3rd " Digestive ----- Alimentary canal -----
- 4th " Absorbent ----- Lacteals and Lymphatics
- 5th " Secretory ----- Glands -----
- 6th " Sensitive ----- Nerves - Brain & Spinal Marrow
- 7th " Muscular ----- Muscles - tendons & Aponeuroses
- 8th " Cutaneous ----- Skin & cellular Membrane
- 9th " Osseous ----- Bones & Appendages
- 10th " Generative ----- Organs of Generation

It will be easy under these heads to comprehend all diseases - ^{to which we are liable} But I shall treat of them without ^{very particular} any reference to this alliance - I shall first treat of the Circulatory system - the first clasp that occurs to us and the most common to our nature is Fever - it is said that more than one half of mankind die of fever - I shall treat of it at some length - What is fever? - Ever since the dawn of Medical science this question has been proposed and remains yet unanswered - fevers are so numerous -

so modified by time - the same & diathesis 7
and diversified - that no description can be adapted to the
whole of them - ^{the latter are not} fever is divided into Idiopathic and Symptoma-
tic - Idiopathic fever is a primary affection of the blood ves-
sels - In Symptomatic fever the blood vessels are secondarily
affected - Cullen defines pyrexia to be those diseases which
commence with a sensation of cold - followed by universal
rigors - and these succeeded by ^{increased} heat - and also in-
crease of the pulse in frequency - ^{a diminution of strength in the limbs} an increase of heat all
will allow - if we admit our senses to be our guide -
but the patient will complain of great heat - when he ab-
solutely feels cold to any person around him - That fe-
vers are ushered in by a sensation of cold is true - but it is
equally true - that the sensation does not always amount
to a shivering - in many instances of the most malignant
fevers - the cold stage is so slight as scarcely to be per-
ceptible - and as to pulse there is every variety of it
in fevers - it follows that none of these symptoms invari-
ably attend - Fevers are divided into Intermittent -

Recurrent and continued - by most authors Cullen
considers ^{as intermittent} inflammation 1st lecture on it -

Intermittent FEVER

This consists of a number of paroxysms - between which there is
an entire cessation ^{or a period} of all febrile symptoms - the cessation is
of various duration - and according to its length the fever
has been differently named - When the paroxysm occurs ev-
ery ^{day} in the morning the period ^{between the end of the one} ^{and the beginning}
of the other paroxysm - the interval
the period from the commencement of the one to that of the other

- every 24 hours - it is named a Quotidian - If 48 hours elapse between the paroxysms - it is called a Tertian - If from the reception of one paroxysm to the accession of another be 72 hours - it is called a Quartan - Intermittent fever sometimes occurs ^{as is stated by some old authorities} often an interval of five or six days - sometimes only once a month - and sometimes once in two months and are named accordingly - as Menstrual - Bimonthly and Annual - ^{may be more apt to recur at weekly periods that in the 14 - 18 - 21 days - he is not well} The tertian appears in the spring and is called vernal - the quartan in the fall and is called autumnal - ^{the tertian is the most inflammatory form - and most easily cured - the Quotidian appears in the morning the tertian at noon - and the Quartan in the evening} Gullen says that the Quartan appears most frequently - I cannot speak of it as relates to the place where he practiced medicine - but the testimony of almost all the writers goes to prove that the Tertian is the most frequent form which occurs we all know that this is the ^{most common & earliest cured} worst form of Intermittent in the United States - A paroxysm of Intermittent is divided into three stages - viz. the Cold - the Hot - and the Sweating stage - the cold commences with languor - a sluggishness of motion - debility - yawning - sneezing - and an aversion to food - ^{some of childrens commencing at different parts with the most} the face becomes pale - the features shrink - ^{giving the cutis asserina} the bulk of every external part is diminished - and the skin ^{as the pores become close} covered with cutis asserina - and appears contracted as if cold had been applied - at length the patient feels of the double & triple tertian - the double tertian - the triple tertian - the 3 point only important to recollect

cold. and universal rigors come on - with pain in the
 head - loins and extremities - the respiration is short-
 hurried - and anxious - ~~the urine is almost colourless~~ ^{small & irregular} - and
 small in quantity - the sensibility is greatly impaired
 and the pulse small - frequent and irregular - In some
 instances drowsiness and stupor have prevailed to so great
 a degree as to amount almost to Apoplexy - these symp-
 -toms having continued for an hour or two gradually
 abate and the hot stage commences with increase of heat
 over the whole body - the face becomes flushed - there is dry-
 -ness of the skin - also thirst - pain in the head - throbbing
 of the temples - anxiety and restlessness - the respiration is
 fuller and more free - but still frequent - the tongue is furred
 the pulse ~~has~~ becomes more regular - hard and full - ^{& frequent} and sometimes
 delirium arises - ^{with a tendency to coma or apoplexy} the symptoms of the hot as well as of the cold
 stage having continued for some time - a moisture ^{sweat} breaks
 out on the forehead - and by degrees becomes general - the heat
 and thirst abate - the urine deposits a sediment - respiration be-
 -comes free and full - and most of the functions are restored
 to their natural state - the patient is left however in a weak
 and wearied condition - these are the usual circumstances at-
 -tending the paroxysm of Intermittent fever - but there are some
 anomalies that should not be overlooked - We are informed
 by Cleghorn ^{Le} - that some paroxysms are not ushered in by a cold
 stage - and that others have not been accompanied by the hot ^{rather diarrhoea} -
 12 hours are considered the length of a paroxysm of a
 genuine tertian -

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It has been remarked that the hot stage ^{has been seen it} preceded the cold
we are further informed by Jackson - that the paroxysm of an
Intermittent has gone off by a copious discharge of urine - or
by alvine evacuation - without any perspiration - Another
anomaly is - that the disease has been known to locate itself
in some particular part of the body - an extremity has
been known to go through all the stages of a paroxysm
the rest of the body remaining free from the attack - I have
known an inflammation of the eye cured ^{after a short time} by the usual re-
-medies for an Intermittent fever - Rush has been highly
ridiculed for speaking of fever and ague of the eye -

Remote causes of Intermittent fever - much controversy
has existed as to the cause or causes of Intermittent fever -
but it is generally admitted that they mostly arise from
Marsh Miasmata - ^{called miasmata} Lanceri an Italian writer made this
discovery - he lived an hundred years ago - prior to
this time the cause of Intermittent fever was attributed
to heat - We are by no means acquainted with the nature of
Marsh exhalations - but we know that they arise from ved-
-gitables ^{not animals} in a state of putrefaction - In speaking of the cause
of Intermittent fever we should not forget that they can
be wafted to the distance of ten miles in sufficient quan-
-tities to produce disease - No fact in nosology is better
established than this - Besides Marsh Miasmata there are
other causes which ^{heat must be miasmata} produce Intermittents - whatever -
1 has been the prevailing stage without the
other - the recast very cold
2 after attacks under the cure of other diseases

effusion to the peritoneum - very liable to bring back on itself
greatly debilitates the system - mental anxiety - abstemious diet -
excessive evacuations - cold is a powerful cause in producing this
fever - especially when accompanied with moisture - as damp -
woods - damp beds &c - It sometimes appears as an Epidemic -
of a mixed character

Termination - It will terminate favourably when the paroxysm is
short and regular ^{intermission perfect & distinct - a full & force} and when there is no visceral obstruction - and
be still more favourable than a protracted one as it
particularly in the chylipoetic viscera - It may be remarked
^{shows the power of life are strong} that the most violent cases are not the most dangerous if they
have the above symptoms - In some cases where death occurs in
the cold stage - it is caused by an effusion of blood into the
liver and where in the hot stage - it is owing to an engorged
state of the vessels of the brain - Dissections shew that in long
and protracted cases - the stomach and sometimes the in-
testines have been inflamed - put a stop to the cold stage
as soon as possible it is at that time most mischief is done to
the constitution - The cold stage stage continues from half
an hour to ten hours - the hot from three to seven and eight
hours - and the sweating from five to six - seven and eight
hours - The patient generally dies in the cold stage of an
intermittent - from want of reaction in the system - a
deposition of red sand in the urine - is a favourable sign
and when the paroxysm is much more violent than common
it is very apt to be the last one - ^{without any assignable reason} Diagnosis - It can only
be confounded with Hectic fever - in Hectic fever the
paroxysms are very irregular in the time of their accession
& may come on at any hour of the day or
night - it is sometimes accompanied with
thirst or Quanta in the urine

- The appetite is good - the bowels are regular - the spirits
 are not depressed - ^{no headache} there is a circumscribed red spot on the
 cheek - the patient is not relieved by sweating - there is
 no deposition of red sand in the urine - and after the
 paroxysm is over the pulse continues ^{quick & irritable} as before - without
 any alteration - In Intermittent fever it is exactly the
^{active} reverse - ^{the tongue red & dry} - ^{venous} ^{intermittent} there are also some diseases which assume the
 Intermittent form - such as Cephalalgia - Gastritis - Enteritis -
 Splenitis - Arthra - Epilepsy - Gout - Rheumatism &c - &c -
 Treatment - The treatment of intermittent fever is divided
 into two ^{periods} - as applied during the paroxysm - and
 that during the Apyrexial period - The treatment during
 the paroxysm is taught us by nature - and we must en-
 -deavour to imitate her - called to a patient during
 the cold stage - we direct him to be put to bed and
 warmly covered - the topical application of warm ^{not}
 bricks to his feet - and if required - to the other parts of
 the body - we also order him warm drinks - such as
 Camomile and Bala tea - and if stimuli are re-
 -quired - wine whey - It has been the practice with us for
 a long time - to give opium during the cold stage - it
 originated with Dr Trotter who says if ^{in the heart} ^{but} ^{of} ^{of}
^{the dose} Laudanum be given at the commencement of the cold stage
 it will arrest the progress of the paroxysm altogether -
 my own experience bears complete testimony to this -
 it requires strict scrutiny

The dose of Dr Trotter answers in most cases - yet sometimes
 40 or 50 grs are required - it arrests the rigors of the body - creates
 agreeable warmth - and relieves the affection of the head - which
 are extremely agreeable to the patient - Intermittents may
 be converted into Continued - they never terminate fatally
 in the sweating stage - emetics should be given in the cold
 stage when there is nausea and an oppressed state of the stomach
 and when there is a partial reaction - During the cold
 stage in some cases the blood recedes from the surface to the
 internal parts - sometimes to the Liver and spleen - at others
 to the Lungs producing difficulty of respiration - in the last
 case it will not do to open a vein - for it detracts blood
 from the vessels without relieving the Lungs - we must
 cup - leech - and give stimuli - such as hot Toddy - Whisky
 &c - There is likewise a determination to the head producing
 coma - we must then open the Temporal artery - apply
 cups &c and at the same time give stimuli - and when there
 is a partial reaction - give an emetic - and apply stimulating
 friction to the surface - such as cayenne pepper and brandy
 It is now 30 years since the application of tourniquets was
 introduced by Mr Geo Kellie - to prevent the cold stage
 and to render the whole prostration milder - the parts to
 which the tourniquets are applied - on the thigh of one side
 and the arm of the other - Mr Kellie recommends the practice
 highly - he says if applied during the cold stage - it will

prevent the paroxysm altogether - and when the cold stage
 is thus prevented or shortened - the succeeding hot one
 will be shorter and milder - The Modus operandi is
 very intelligible - by confining the blood to a narrow
 compass - it is concentrated near the vital organs -
 which thus possesses more power of resisting or putting
 off the cold stage - In practice I have never found the ap-
 plication to answer the high encomiums lavished upon it
 by the author - The immediate effects of an emetic when
 administered in the cold stage - is to produce a new action
 in the system - and by this means preventing the further pro-
 gress of the paroxysm - we should likewise use them in the
 last stages - The indication is first to remove irritation
 and promote perspiration - The irritation arises from the
 accumulation of bile in the stomach and must be re-
 lieved by vomiting - but in many cases this interference is su-
 perceded by spontaneous vomiting - and when this occurs
 all we have to do is to assist nature - by giving copious draughts
 of camomile ~~and~~ Bala tea - In the hot stage we are to use
 diaphoretics - By consulting the various European writers
 we find that the greatest confidence is placed in James's
 powders - They certainly are an important remedy - &
 when they can be procured good are a very usefull
 medicine - it is now no longer in use among our remedies
 it has been superseded by others quite as usefull - and
 had found Tourniquets usefull in cholera
 when there was spasm & in other spasms

not so difficult to procure - In country practice the Eu-
 -patorium perfoliatum or boneset has been much used
 and is one of the most powerfull and certain diaphore-
 -tics = Dr Lind first introduced opium in the hot stage
 In some of my former lectures - I stated that opium
 was altogether useless - if not highly pernicious - when
 given in the hot stage - Now Gentlemen I must confess
 that my notions were founded rather upon hypothesis
 than experience & I have since found it a most valuable
 medicine when it is given when there is no plethora or inflammatory
 diathesis existing - but where these occur - it is not only injurious
 but aggravates every symptom of the disease - it protracts it and
 makes it more difficult to cure - this is the result of my expe-
 -rience Gentlemen and I must once more aver - that when there
 exists much excitement opium must be laid aside altogeth-
 -er - Dover's powder may be given with advantage - but the
 diaphoretic peculiarly adapted to the hot stage - is the acetate
 of Ammonia or Spirits of Mindereri - the dose is a table spoon
 full and repeated if necessary - it is preferable to the other
 diaphoretics it being more grateful to the stomach and
 more diffusible in its effects - in cases of nausea it will be re-
 -tained when others ^{will be} rejected - this is the ordinary treatment of
 Intermittents - But when they are accompanied with in-
 -flammatory symptoms - the treatment will of course be
 somewhat changed - In the spring they are more or less in
 the offensive & draught & the alkaline
 mixture are both very good to allay
 vomiting

inflammatory and also during the prevalence of inflammatory
 Epidemics - there is no difficulty in detecting the form
 of the disease by the symptoms which attend it - they
 are a full strong pulse - laborious respiration - severe
 local pains in the head and breast - the treatment in
 this consists in venesection during the prodromic - follow-
 ed by emetics - mercurial purges - and the mild diaphae-
 tics - such as the Spirits of Mindereri &c - in the sweating
 stage very little is necessary - In weak & enfeebled persons
 very profuse sweating comes on sometimes - in this case we
 must support the patient by stimuli - check the ^{or wine of opium} moderate
 perspiration by renewing a part of the clothes - by the
 application of a large blister over the stomach - by
 sponging the body with a solution of ʒ 3. of Alum to
 1 pint of brandy or whiskey ^{wine} - We come next to the treat-
 ment of intermittents during the aggraval period - this is
 of two kinds - that which is applicable during the entire
 intermission - and that which is applicable during the ap-
 -proach of the paroxysm - Of the medicines which answer
 the first indication - none is so celebrated as the Peru-
 -vian Bark - it has been long employed and its superiority
 continues still to be acknowledged - amidst the fluctuation
 of opinion and the changes of practice in the disease - at pre-
 -sent little difference of opinion exists - with regard to
 the rules to be observed - with regard to the rules to
 be observed with a flannel cloth ^{the} well
 generally a ^{new} the purpose

be observed in the administration of the medicine - it was once
 thought improper to use it in an early stage of the disease - as a
 number of paroxysms was thought ^{by Boerhaave} necessary to throw off the morbid
 matter - upon which they supposed the disease to depend - this
 is a great mistake as has been proved by modern practice
 which is diametrically opposite to it - for the earlier the
 bark is used - the more complete and speedy will be the cure
 the only ^{circumstances} instances that can delay the administration of the - is
 the condition of the alimentary canal - and sometimes the sys-
 tem generally - but doubt even exists with regard to preparing
 the system at all for the bark - some say that it is perfectly
 useless - and that the most happy effects have resulted from the
 use of the bark immediately - this may be admitted as a gen-
 eral rule - it is hazardous to employ it before vomiting with
 emetic tartar or purging with calomel - As preparatory to the
 use of bark emetics have given way to mercurial purges -
 these will answer very well in some cases - but emetics are
 frequently indispensable - not only on account of the evacuations they
 produce - but because they are absolutely necessary to make a pow-
 erful impression on the ^{stomach} system - in order to break the morbid
 concatenation on which the disease depends - If during
 your tonic treatment your patient has a furied tongue - and
 a bitter taste in his mouth - rely on it he has not been suffi-
 -ciently evacuated - and you must again recur to evacua-
 -tions - If during the apyrexia he is feverish and the apyrexia

is not complete we must deplete - Resection is imperi-
 -ously demanded in some cases - at the commencement
 of the disease it is more or less inflammatory and without
 bloodletting - bark is rejected by the stomach and if
 retained is of no use - as it serves only to aggravate the dis-
 -ease - My rule is therefore to withhold the bark - until the
 system is prepared for it by proper evacuation - by this course
 I am certain it will display so much certainty of effect - as
 almost to entitle it to the former name of specific - Inter-
 -mittents are often associated with visceral obstructions - when
 this is the case the bark should not be employed - it should
 be when there is no inflammatory diathesis to prevent it - but
 where acute pain is seated in the obstructed viscera it will
 be injurious - the treatment here should be (when there is
 no inflammatory diathesis) blisters over the part and slight
 salivation - this will cure both the obstruction and the
 original disease - blood-letting is never to be neglected when
 the inflammation are so great as to require it - at one time
 it was doubted whether the bark should immediately pro-
 -ceed the paroxysm - I should scrupulously avoid it at
 the moment of the attack - as it increases the fever and causes much
 distress - some go so far as to say ^{that} no remission is ~~remission~~
 is required in its use - Dr Clarke and others are of this opinion
 but I have always observed - that when the slightest febrile
 symptoms prevailed - bark always aggravated - indeed the
 1. the stomach may inevitable use
 topical bleeding

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universal rule now is to discontinue it immediately - on the accession of the paroxysm - The Bark is given in substance in several different vehicles - with I think is the best - the dose is from 15 to if 3 taken as often as the stomach will bear it - or thus if 3 coarsely powdered Bark to be put into a quart bottle of water with a perforated cork - placed in a pot of water and boiled from two to three hours - the dose is a wine glass full every hour Bark combined with cloves or cremon-tartar - in the proportion of 13 of Bark and 13 ~~and one of the other~~ - In the West Indies ʒ 3 is given in the morning and then omitted all day - I have imitated this practice in the person of the late Mr. Dallas with great success in this way it proves is much greater than when given in small repeated doses - but perhaps there are few stomachs that can bear so large a dose - the fact is an interesting one - and should not be forgotten by you that in some cases the stomach is so irritable as not to bear the bark in the simplest form - in such cases we should combine the bark with an aromatic - or some substance that will render it more agreeable - the Virginia Snake root is the best addition - this combination has effected a cure - when bark alone has failed - the formula is peculiarly adapted to children and delicate women - Bark sometimes purges - when this happens it should be combined with laudanum or opium - when it produces constipation it should be combined with rhubarb - Intermittents are sometimes connected with an acid state of the stomach - here the Bark should be combined with magnesia or a solution of the extract of Licquorice which gives the taste of bark -

an alkali - this combination is said by an English writer to act more powerfully in arresting the progress of the disease than the bark alone - Notwithstanding the various modes in which bark has been prescribed to make it sit well on the stomach - cases often occur where we cannot administer it in any shape whatever - without its being rejected - and there are some cases in which it passes off by purging - and therefore produces no salutary effect upon the system - in such cases injections of bark have been recommended I have never obtained from it in this way any very good effect - except in children - it being difficult to administer it to advantage from its disagreeable nature - and the necessity of repeating frequently the clysters to produce the desired effect - It is possible I may have derived some benefit from this mode of using it - but I cannot say whether it will arrest this or any other disease - besides the irremediability of the rectum is so much increased by the frequent repetitions of the injections - that the bark cannot be retained for a moment - but as cases may occur - in which it will be necessary to attempt the cure in this way - I shall give you my mode of administering them - it is as follows - viz. - R. Pulv. cort. peruviana $\mathfrak{ss}$ $\mathfrak{ss}$ 3 - Mucilage of Gum Arabic - starch - or flax-seed - let the mucilage be as little in quantity as possible - that it may not from its bulk excite the action of the rectum - and thereby be immediately discharged - to lessen irremediability Laudanum may be combined -

The external application of bark has been recommended - the modes of applying it are various - Cataplasms of it have been applied to the stomach and other parts of the body - some recommend a waistcoat with bark quilted in it to be worn next the skin - I have tried these but do not think them of much efficacy - it is said that cures have been effected by immersing the feet in a strong decoction of the Bark - in this way I have used it with great effect - Oak bark is likewise a useful remedy in intermittents and has been applied externally in the same manner as cinchona Dr Darwin states that cures have been effected by sprinkling the sheets of the patients bed with powdered peruvian bark - but to believe this even on the authority of Dr Darwin requires no small stretch of credulity - There is another and a more efficacious way of employing it - it is by applying it in a dried state to the surface - this is by means of the bark waistcoat I have mentioned - I have derived advantage from it in several cases of delicate women and children - the Modus Operandi of bark when externally applied is very intelligible - it first produces on the part to which it is applied a tonic impression - this is communicated by means of reverse sympathy to the stomach - this being strengthened and invigorated operates upon the whole system - breaking up ^{or reversing} the morbid association upon which the disease depends Next in efficacy in the cure of Intermittents is the Serpentina it was long used by Sydenham with wine - this he adopted as a general rule when wine is necessary - Serpentina is amply powerful

Self dose of Quinine antiven
all cases where the bark does
equal to a 3 of the cinchona bark

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but whether it is adequate to the cure of intermittents I cannot say - I can answer for its efficacy in combination - complete cures will be effected when they have in vain been attempted by Bark alone - this has satisfactorily proved by universal experience = R Serpentina . ꝑ ʒ Kulo. Cort. Peruꝝ ꝑ ʒ: falk. Soda 40 grs - mix and divide into 4 powders - take one 4 times a day = why this combination should produce more effect I cannot conceive - but we all know that effects are derived from a medicine when combined with another - that cannot be obtained from it when given alone - the above formula has been used for more than half a century in this country and it has repeatedly wrought the most important cures - I recommend it to you with the greatest confidence I have seen cures - where all other remedies had failed effectually cured by this recipe = Serpentina is peculiarly adapted to intermittents in children - the Eupatorium perfoliatum is a very important medicine in the cure of intermittents - has extraordinary powers - it may be so managed as to be both diaphoretic and tonic - by its combined diaphoretic and tonic powers - it is peculiarly adapted to intermittents - when the interruptions are not distinct - and consequently when the Bark is not admissible - it is given in all stages of the disease indiscriminately and is used almost exclusively by my friend Dr Horack of New York - there is another species of this plant the Eupatorium pilosum - which is also used in Intermittents - but is not so powerful as the perfoliatum -

as a remedy in this disease we should not overlook the Centaury or the
Chironia Angularis - every part of the plant is medicinal and like the Eu-
phorbia is used when the cinchona is inadvisable - it is like the
preceding remedy both diaphoretic and tonic - and may be used both
during the paroxysm and the aggral period - an infusion of this
plant may be given so often as the stomach will bear it - of the
Dogwood of this country we have two species - viz - *Cornus florida*
and *Cornus Sericea* - the former is the best - the latter is a small
shrub growing in marshy countries called red dogwood - the
former is well known to you - the bark of this tree has been ex-
amined by a student of this University - and found to be nearly
equal to the cinchona - It is given in powder in powder in the
same dose as the cinchona and likewise in decoction - Nearly allied to
this is the *Prunus Virginiana* - I have no doubt it may be usefull - coun-
try practitioners speak very favourably of it - The bark of the
wild cherry is usefull and is given in decoction - The black alder
has also obtained a place among the remedies for Intermittents
I know nothing of it by experience but it is said to be usefull -
the several species of oak are remedies in this disease - the bark
of the white oak is nearly allied to the cinchona - but is not
so powerfull as that of the black and chestnut oaks - I have not
employed them myself but they are said to be important me-
dicines in the cure of Intermittents and are given in the same
form and dose as cinchona - All the species of our willow
are valuable tonics - I attended a great number of experiments

made with them in the Philadelphia Aleut House which proved their efficacy - in intermittents they are given in decoction in as great doses as the stomach will bear - you know the proper bark was used by Dr Rush in intermittents - we are informed by his papers on the subject - that he considered it next to the cinchona in efficacy - after its publication many practitioners employed it - and tho' the reports concerning it were somewhat contradictory - its efficacy cannot be denied. the mode of using it is in decoction a substance then remedies which our own country affords are not all possessed of great powers yet being easy of access and indigenous should not be unknown to you - the cortex angustura was introduced about 25 years ago - at first it promised to supersede the cinchona - but it had completely lost the confidence of Physicians - it has however again been restored and gained much praise especially in cases where there is much irritability of the stomach. and where the cinchona cannot be retained - I have found it useful in cases of intermittents associated with Dysentery. the dose is from 2 to 30 grs - Not many years ago the Luveticinia Febrifuga was introduced it has not been known to possess any very great powers - it is however pretty well adapted to cases similar to the above mentioned - By consulting medical writers you will find many substitutes for the bark - the Quassia is a most grateful bitter to the stomach. and perhaps

is well suited to the weaker forms of intermittents and those associated with Dysentery - but it is by no means adapted to the confirmed state of the disease - Gum Kino among the other remedies has been recommended - it was first used by Dr Fothergill of London and his report on the subject is so flattering that we might be induced to believe it would surpass the cinchona - he has been imitated in this country - but we are compelled to acknowledge that by itself it is feeble and insufficient - but it has sometimes proved a powerful remedy - when given in the following combination viz Gum Kino ij - Radix Gentian ss - Gum Opie ij - Mix and divide into 12 pills - one to be taken every two or three hours - also one during the interval between the paroxysms. This formula seems particularly adapted to Intermit-
 tents accompanied with certain local affections - Carbon is the last redigitable remedy I shall mention - its recommendation is only recent but it comes to us from such high authority that we are forced to believe it possesses no small powers in this disease - it has been employed for the last year or more by Dr Caldwell - Physician General in the Mediterranean - his account of it may be seen in the 10th Vol of the Medical and Surgical Journal - after employing it a number of times he seemed to think it equal if not superior to the Peruvian Bark according to his statement its general effects is - to destroy the unpleasant taste of the mouth - to allay thirst and to stop vomiting - to promote digestion - and invigorate the appetite

46 appetite - but it produces a slight constipation - he is not particular as to the kind of wood - being only careful to select the best charcoal - the number of patients cured by it according to his accounts is 105 and it has become so popular a remedy - that the inhabitants resort to it without the advice of a physician - If one half of this statement be true it must indeed be a valuable medicine - Charcoal is particularly well adapted to those cases of Dysentery & Diarrhoea which assume the intermittent type It may be given in the same dose as the cortex Peruvianum Sulphur is likewise employed in this fever - it was introduced by Mr Granger who prescribed it in the dose of $\text{ʒ} \frac{1}{3}$ in ardent spirits and in this way it is still administered - at one time it was my conviction that the efficacy of the prescription depended on the spirits - but I have since known it so effectual that I can no longer doubt his the correctness of his statement - In this city it was a very popular remedy and in the suburbs of it - which is inhabited by low Irish - they rely on it entirely It may be given in either Mith or spirits - in either way the effects are the same - I think this a valuable medicine in all granular diseases that have a tendency to a periodical type - especially Cephalalgia and almost all the nervous affections as Chorea - Apoplexy &c - the dose in Intermitents is from $\text{ʒ} \frac{1}{2}$ to $\text{ʒ} \frac{3}{4}$ The Sulph. Cupri. is highly extolled by Dr Adams of London & Monroe of Edinburgh the latter informs us of its efficacy in many obstinate cases - which occurred in Holland and

in the Netherlands - it is best suited to old protracted cases - especially the Quartin - the way Monroe used it and which I have adopted is as follows - R Sulph Cupri 4 grs Ext⁺ Cort Peruvian 18 grs - Syrup L.S. mix and divide into sixteen pills - of these he gave 4 every day & continued these for two weeks - Cuprum Ammoniatum has been recommended - in some periodical diseases as Epilepsy &c - it would seem also adopted to obstinate Intermitents - I believe the Nitrol is one of the best remedies in the Quartin - the dose is $\frac{1}{4}$ of a gr ^{with a little opium} - repeated every 3 or 4 hours and gradually increased to $\frac{1}{2}$ a grain - the above is adapted to all forms of fever - but more especially to old Quartans - the dose of the Cuprum Ammoniatum is 1 gr gradually increased - Sulphate of Alumina ^{the album of the shops} is known to most of you - and has been long used in Intermitents it is thought by some to possess great powers - Cullen used it in combination with nutmeg but found it too irritating to the stomach whilst those* whose experience was ample declare that in this way it is next to the Bark - from my own experience I have not much to say on the subject - I have seldom used it and with not much advantage - But we are nevertheless informed it has been proved to possess no small powers in the intermitents and remittents of North Carolina Chalmers used it also in Billious fevers - its efficacy has been confirmed by Dr Darwin he says it should be restricted to those cases which are associated with bowel affections - especially the weaker forms of Dysentery and Diarrhoea the dose is 4 or 5 grs

et Linda

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combined with Opium - Saccharum Saturni has also
been added to the catalogue of remedies in this disease - and
many have great confidence in its efficacy - at one time it
was in great repute among some of the practitioners of this
city - Dr Barton (with the exception of Arsenic) placed it at
the head of all the remedies in the care of intermittents - but
the representation on that subject has been too strong - for I
have repeatedly used it without success - and from my own
experience I would say it ought to be placed at the foot
of the remedies - arsenic is nearly allied to the former my
impression is that it has been overrated and whoever expects
it will prove a certain remedy will be woefully mistaken dis-
-appointed - either arising from want of power or the ^{bare} manner of
prescribing it - in all weak forms of the disease - whether arising
from a tendency to ~~protract~~ Typhus - or from weakness of con-
-stitution - or from debauchery it is totally insufficient - or
perhaps absolutely injurious - this we ought to expect
from its known effects on the system - bark would secure
from its tonic powers to invigorate the system - and ren-
-dering it more capable of combating disease - Tho' arsenic
is placed among the tonics - it has no claims to be as-
-sociated with them - during its operation it produces lan-
-guor and debility of ~~the whole~~ both as regards the stomach
and the whole body ^{here combine the work with} - its remote effects are pale coun-
-tenances - extreme prostration of strength - and adynamic

swellings - in those forms therefore it is totally inadvisable - even
 when exhibited under circumstances the most propitious - it generally
 fails except in children - here it is generally successful - Arsenic is
 very prompt in its effects - if then it has been used 5 or 6 days with-
 out being serviceable - it should be laid aside - for if longer contin-
 ued it will generally prove mischievous - we have lately heard from
 good authority that a combination of bark and Ar-
 senic will cure some obstinate cases - which will yield to nei-
 ther of them alone - I think this sound practice - I have adopt-
 ed it in several cases and have derived the most decided advan-
 tage from it - the arsenic ^{it is said} prepares the way for the bark -
 which now is capable of making a more powerful impression
 on the system than it did before - we should subject our patient
 for some time to the use of arsenic - and then administer the Cin-
 chona - the practice as yet has not been long imitated - but
 it may prove highly beneficial - Arsenic is given in the form
 of Fowler's solution - dose 5 or 6 gr^{ss} - ^{every 3 or 4 hours} The spiders web was used not
 long ago - this extraordinary medicine was introduced by Dr Fock
 - son - we know however that spiders & spider's web were long
 ago spoken of as a remedy - but it is lately that our practice atten-
 tion has been drawn to this practice. Dr Jackson informed us
 that the cobweb is decidedly the most efficacious remedy
 that has been used in Intermittents - the black spiders web
 is the one that is used - it should be recent - the test of this
 when it is tenacious - he gives it in the dose of 10 grs rubbed
 through the white oxide of arsenic better dose
 110 gr - pill every 3 or 4 hours

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up with a little mucilage so as to form a pill I use it in the dose of 5grs
every 3 or 4 hours - it produces a most agreeable anodyne effect - causes
a glow over the whole body - and quiets irritation of the body as well
as mental inquietude - it is given during the Agryxia and also du-
ring all the stages of the moroxygen - Dr Jackson told me it
was highly useful in nervous diseases and superior to Opium -
whether these circumstances have been lavished with justice - I cannot
say - but Dr Jackson is a distinguished physician in England -
and the remedy is highly worthy your attention - Oleum Terebin-
thinæ has been used in the weaker periods of the disease in the dose
of a half or a whole tea-spoon full three times a day - Emetics repeated
daily or every other day will cure intermittents when every thing else fails!
Other Gentlemen are the remedies most celebrated in Intermit-
tents - There is another which was introduced by the French prac-
titioners - who strenuously recommended it - I allude to the Ani-
mal Gluten - recently it has been used with success in this
country - one of our oldest and most respectable practitioners - by
an exclusive use of calfs foot jelly effected a complete cure in
the case of his daughter which had resisted every other remedy
whether this is a solitary case or whether the article possesses virtues
must be left to your future practice - The French use it in the
form of glue - whether it really possesses the virtues ascribed
to it or not I cannot say - but lately they have recalled
all the praise ^{formerly} bestowed upon it - Sometimes cases will
occur which are so obstinate as to resist all the remedies
after omitting he should be put in
bed & kept under the moderate use of
opium - & just before the paroxysm give a large
dose as 1 or 2 grs - This is old cure is very

I have mentioned and when this is the case - it is said to indicate that the disease is kept up by visceral obstruction or by a habit so confirmed - as to require the most powerful impression upon the system to remove it - then we must appeal to Mercury - It is more than one hundred years since this medicine was used in those diseases - and ample experience has proved it to be decidedly efficacious - to obtain a full effect we must gradually introduce it into the system and keep up a gentle ptyalism for 3 or 4 weeks - as a ^{substitute for} ~~substitute for~~ ^{substituting} Mercury - blisters have been recommended to be applied to the extremities - care being taken not hastily to check the discharge they act upon the same principle as Mercury - they produce upon the parts to which they are applied a strong impression - which is conveyed to the stomach - and thence over the whole body causing a solution of the great chain of association which constitutes the disease ~~We now come to the second class of remedies - those during the approach of proflia - when we expect an attack we put the patient to bed and it is our practice (with Dr. Potter) to administer Opium or warm drinks - to promote Diaphoresis the prompt - powerfull and different stimulants have been recommended which answer very well - the patient should never be allowed to load his stomach just before the paroxysm - this will expedite the accession and produce violent vomiting - Cases are indeed recorded of the course of the disease having been entirely arrested by fasting sometime before the anticipated attack - but any great change in the stomach it is probable might pro-~~

duce a valuable where the disease is kept up by habit

9th produce the same effect - But it is the custom to make a ve-
-ry strong impression on the system - and this is the most
prompt mode of affecting the disease - whatever is capable
of doing this has sometimes removed it a Fear - Grief - Turbidity
But to Emetics the most obstinate yield - the effects of these
are not only to evacuate the prima via - but to produce
a strong impression upon the whole system and thus to prevent
the paroxysm - a blister applied over the stomach has had the
effect of putting off the paroxysm - I have now nearly finish-
-ed my remarks on intermittents - they are often intractable and
difficult to manage and are most frequently the cause of
other diseases - thus their immediate effects are to degenerate
into continued fever especially Typhus - and to produce
Hydrocephalus Internus - intermittents are often the cause of
the latter in children - their remote effects are congestion
and oedema of the great viscera leading to jaundice -
Dropsies &c no opinion is more erroneous than the ben-
-eficial tendency of Intermittents - It is still a favorite
dogma of the adherents of the Boerhaave school that they pro-
-duce the most salutary effects on the system - and it is
their opinion they ought to be allowed to run their course
when unaccompanied with dangerous symptoms - they
suppose that in this way maladies have been removed
which have resisted the powers of medicine because of
adopting this opinion it is erroneous both in theory
- its chronic cases small and
repeated bleedings are sometimes useful
+ even necessary

2nd old cores has seen the black pepper with 93
and practice. We cannot deny however that intermittents have occasion-
ally removed other diseases. There are a few instances where it has
cured Gout. Rheumatism and the cutaneous diseases - they have also
been serviceable in some spasmodic diseases as Chorea - Epilepsy
& Asthma & now and then the Malaria especially the Melancholia

In my pathology I mentioned to you Dr Morgan's practice of send-
ing his febrile patients to places where they would be exposed
to much exhalations - and that those who were attacked with
Intermittents derived most benefit from the change - After the
cure of Intermittents has been effected - we should - as the pre-
disposition still exists in the system - direct our patient to
avoid the exciting causes as cold - fatigue - exposure to night
air - he should not walk early in the morning without eating
and should keep warmly clad - After the paroxysm has been
prevented - it is liable to return in a week after unless preven-
ted by tonics - if it is inflammatory neither the diet or drink
should be very stimulating - It is said a considerable quan-
-tity of wine taken before the paroxysm - will often ward off the
attack but if it should not the paroxysm will be much more
violent - If the disease has not been very obstinate and long
continued the remedies should still be administered - especi-
-ally in cold & moist weather - After all our remedies have fail-
-ed we must advise our patient to take a journey or sea voyage

Dr North's recipe for ague - R Gum Camph 4 grs - Eucalypti 2 grs - Gum Opium 1 grs
R Pulv Cinchona 33 - Flor. Sulph: 13 - Pulv Serpentina 13
made into 6 pills one every 15 minutes
made into 12 pills one every hour in water

2nd old cores never give back when the
bowels - when not given it is best in
any case does

Continued Fever

So called by ~~Physiologists~~ - This class has been differently arranged - but I shall consider it under the two heads ~~typhus~~ ^{or consecutive} ~~typhus~~ and Typhus. The Typhus is the most confirmed and inflammatory bilious fever of our climate - and is exceedingly prevalent in every part of our country - particularly in our Southern States - Like the fever I have mentioned to arise this arises from Malaria - Miasma - and various other causes - Indeed the Intermittents Recurrents and Continued are all the same disease - but of a variety of type - they arise from the same causes - occur in the same season of the year - exchange with each other and are cured by the same remedies - Continued fever is where there is no intermission of fever - but where there are remissions and exacerbations which take place every morning & evening. The remissions in the morning & the exacerbations in the evening - Diagnosis the season of the year - the vomiting of bilious matter - and the paleness of the skin. Prognosis when after a few days there is a remission of the symptoms and the stomach is composed - the pulse soft - slow and natural ^{skin soft} - the urine depositing a lateritious sediment - the mind perfectly rational - the symptoms are favourable - but on the contrary when there is Coma - Stupor - Delirium - Nervous tremors - subsultus tendinum - a dark & encrusted tongue - ^{cold wrists & feet} - a dry hot skin - and gastric disorder - attended with vomiting - they are unfavourable. His definitio has been objected to - but thinks it right & thinks there is no such thing as a real continued fever 2 Prognosis ^{symptoms} as in ~~intermittents~~ ^{intermittents}

portions in the progress of the disease - so that from the beginning
 to the 11th day - a tertian takes place and from the 11th to the 20th a Quar-
 -tan period is observed what determines the the period to this
 change on the 11th day - we have not clearly perceived - As a dis-
 -position exists in nature to a remission - we should employ our
 remedies so as to assist her. Thus I have often removed con-
 -tinued bilious inflammatory fevers - The indication is ob-
 -vious - to reduce arterial action to its natural state -
 and of all the remedies we possess blood-letting is the most
 powerfull and efficacious - But in the employment of this
 remedy we must be directed by judgment tempered by
 discretion. Never prescribe for the name of a disease
 for the same disease may be different in different in dif-
 -ferent persons - and different parts of the country - This cir-
 -cumstance is strikingly illustrated in continued fever
 in this city it is a ^{very} different disease and differently treated from
 that in the southern states - there it is a highly inflammatory
 fever calling for in its treatment a profuse use of the lancet
 whilst here venesection must be laid aside - or very spa-
 -ringly used - let me however observe that in all cases -
 wherever they occur - which are accompanied with a strong
 full pulse - a hot skin - and symptoms indicating a high
 degree of inflammatory action - we may always resort to the lancet
 with safety - ~~use it as at once remove the excitement~~
 Evacuations from the alimentary canal are
 highly ~~powerful~~ ^{remissible} effect on the disease - his
 highly important in all cases - but more particularly in this
 rule is to induce syncope or a state approu-
 hing to it - regardless of the quantity - a
 large bleeding is radical - a small one palliative

from the great quantity of bile - my practice is always to follow
 the lancet with an emetic - and the best is Emet-Fort. & Ipecac
 combined - the Ipecac gives promptness to the operation - and
 the antimony remains a considerable time on the stomach - and
 thereby evacuates it completely - the dose is Ipecac - 20 grs - Emet-Fort.
 ʒi grs - I am attached to emetics as you may perceive
 in all fevers - I have in my own practice found them decidedly
 superior to purges - but to obtain full efficacy from emetics
 it is necessary when the fever is intractable to administer them
 twice a day - about 40 or 50 years ago - it was the custom to
 give emetics in all cases of bilious fevers - but by an ar-
 tificial preference - physicians have resorted to the less
 effectual practice of purging - But emetics you will
 find are again reviving - in fact they have superseded pur-
 ging - By emetics alone the French declare they are able to over-
 come the bilious fevers of their country - we are told that in
 the continent of Europe emetics are universally recommended
 they are highly extolled by Jackson & Clark. In this
 city they have been long employed and their efficacy has
 been long attested emetics relieve head-ache and Mania and less-
 -en the heat of the surface and by a mild diaphoresis they
 sometimes produce a resolution of the disease - I am ac-
 -quainted with very few cases in which they would not be
 proper - the exceptions to their administration are a short neck
 a florid countenance or in other words when there is a -
 I repeat if the tongue is furred the
 stomach sick or vomiting of bile oc-
 curs

predisposition to apoplexy - and advanced states of pregnan-
 -cy. Emetics should be given upon the accession of con-
 -tinued fever - but if called after the vascular system
 has become involved - the proper mode of proceeding - will
 be to deplete by venesection &c in the first place - In the first
 instance the fever is symptomatic & will disappear after the
 cruditiees have been thrown off the stomach - by which the
 fever was produced - Emetics should never be given when
 the stomach is inflamed which may be known by pain
 over the part - in the head - & a quick - hard and ~~irre-~~
~~regular~~ pulse - with irritability - frequently throwing up what
 has been taken on the stomach - Cathartics are next in
 utility to these - they all act by evacuating the bile &
 foul contents of the alimentary canal - The best cathartic is a
 combination of mercury with some other cathartic as Calomel
 & galap or rhubarb - It is worthy of remark that the ad-
 ministration of purges we should watch for the accession
 of the fever - and if practicable give them at that time - as other-
 wise they are apt to lie on the stomach - if a purge is given
 during the paroxysm - it will be immediately rejected - or lie
 quietly on the stomach for many hours - this purge is to
 be followed by the saline combinations which are less
 stimulant and have less action on the blood vessels - the
 emulsion which I prescribe and prefer is as follows -
 R. Lab. Glaucⁱ 13 - Emet. Tart 1gr - Succ Lemon 15 - Aqua Fort 53
 Mij. - the dose a table-spoon full every hour - the advan-
 -don of Calomel 1gr until 6 or 8 grs are given
 then castor oil & generally brings the trans- stools

— before the use of calomel in small doses must purg freely to
discharge the common contents of the bowels —
— stage of this is that it opens gently and brings on diaphoresis
as the fever advances enemata ^{of molasses water} are often found useful — espe-
— cially when the stomach is intractable — they are also used to quicken
— in the operation of purges — Incident to all fevers is constipation
of the bowels — and in these cases cathartics may be repeated again
& again without effect — here it is that a common clyster is ef-
— ficacious — we should continue purging as long as there is a furred
tongue — or a sallow complexion — to such a case a combination of
calomel and Gamboge is applicable after using this combina-
— tion we should ^{exhibit} ~~use~~ mild purge — or Salts — Emet Fort added
to salts increases their efficacy and likewise an infusion of
peru — sometimes it is necessary to produce an artificial
Cholera morbus — for this purpose a combination of calomel —
Gamboge — and Fort-Emet answers well — Diaphoretics then you
all know are very important remedies in fever — but perhaps
no class of medicines are in their administration are more hurt-
— ful than these — if physicians are careless in their use
the worst consequences result from them — I hope therefore
Gentlemen you will not forget the directions I detailed
in my therapeutics — they are either internal or external
and of various powers — suited to various cases — but when
the crisis is desired the antimonials are the best decided-
— ly — every practitioner is acquainted with their pow-
— er — they were employed by James with great success
and their efficacy was confirmed by Cullen & Fordyce —
12 using Diaphoretics should be very careful that
we do not use stimulants before the proper depletion
otherwise we will bring on a typhoid type

much difference of opinion existed with regard to their pro-
 -peration the celebrated James's powders - were highly extol-
 -led - and they were once thought so good - that an imitation
 of it was made - called *James's antimonialis* - but phy-
 -sicians have settled down to that - limit as a diaphoretic
 This is given in the dose of $\frac{1}{4}$ - or $\frac{1}{2}$ of a grain - a question
 has arisen - whether its efficacy depends on the nausea it ex-
 -cites - By Dr Cullen it is contended that it is never useful
 unless it excites nausea - but I believe from my experience
 it is not a sound theory - we know that nausea is not follow-
 -ed by any abatement of febrile symptoms - for the ad-
 -ministration of Squills - Digitalis and Tobacco - which pro-
 -duce great nausea is not productive of any diaphore-
 -sis - It is I think a law of the animal economy - that
 if nausea exists to any extent it will be followed by re-
 -action - which necessarily increases the fever - whether
 this is true or not I have nevertheless acted upon it
 in my practice. I am careful to regulate the dose
 so as not in the least to offend the stomach - distinct
 from this I am of opinion it will prove mischievous
 The antimonial preparations act by a specific vir-
 tue - they not only occasion diaphoresis & nausea - but make an
 impression on the whole stomach and whole body - they are
 emphatically antifebrile - use them in small doses so
 as not to occasion the slightest nausea about the stomach
 1 Fordyce contra in this Chap. - contends some
 own diaphoretics as the effect of the draught
 acts by allaying the nausea

nor does the benefit depend on the quantity of perspiration 121
and the progress of the fever will be interrupted - But not
so with Ipecac. and other remedies which are capable of produ-
cing nausea alone - The antimonial preparations I repeat are
useful by a specific impression which they make on the system
they annihilate the chain of morbid association - upon which
the disease depends - But cases will occur - where from the
irritability of the stomach they cannot be retained - here we
must resort to some of the hindered articles - of these the saline
mixture is the best - the following is the formula - R Succi-
-num Lini^{ad rationem}onis vel acetum coarctum 2℥. Carb. Potass 2℥ vel 2℥
add aqua font 2℥ - Sac albi 1℔ - Mix - a table spoon-full every
hour or two - This has not only great power in subduing arte-
rial action - but quiets irritation - If you wish to increase
its diaphoretic powers - add Ess. Vit. Dulc. or antimonial
wine - besides these there are others - as opium & Ipecac - but
these I rarely found useful in fevers - they are better adapted
to the phlegmasia - In making external applications of
heat - we should do it in the form of the vapour bath - by
immersing hot bricks in vinegar and water and whilst the
vapour is arising wrap them in cloths - and apply them to
the sides of the patient - 3 or 4 applications of this sort will
speedily bring on a copious diaphoresis - Heat & moisture
are very different in their effects on the body - the former
increases fever - whilst the latter produces a plentiful dia-
-phoresis and reduces febrile action - Diaphoretics when
or better by mixing with tepid water or vinegar

properly employed are a most important remedy - and are productive of very beneficial effects - they cause the blood to flow from the viscera to the surface and thereby prevent or remove congestion - they obviate constriction of the extreme vessels - and they diminish the quantity of circulating fluids - Diaphoretics are universally employed but it must be obvious to you that remedies possessing such powers must not be indiscriminately applied prescribed. Theory has had its influence in carrying the practice of sweating to an immoderate length. Fever being supposed to arise from a morbid action in the system and from an effort of nature to discharge it. Let me impress it on you never to resort to these remedies untill the system is prepared for their reception by direct depletion - after this you will find them of signal advantage - but even here we must select the mildest sort - as the antimonial preparations - It is universally laid down as a principle by practitioners - never to excite diaphoresis by great force but induce it by lenient means - There is a class of diaphoretics denominated R^epigerants which are decidedly preferable to all others in inflammatory fever - There are almost all the neutral salts - but they are far the best - and most employed - how they act is not so easily explained - By some of the late writers an explanation has been attempted upon chemical principles plausible however as it may appear it does not afford - by any means a ~~salutary~~ *salutary*

means a satisfactory solution of the problem - they however reduce arterial action and produce upon the surface a gentle diaphoresis - and are thereby well adapted to inflammatory fevers. I have said the Nitre was commonly used - it may be given alone - but it is common to combine it with other articles - with Calomel & Tart Emet - it forms the celebrated powder of Dr Rush R Nit Potassa 15 - Calomel 12 or 16 grs Emet Tart 1 gr - Divide into 4 pills - one every two hours - This rarely affects diaphoresis but it reduces arterial action and is therefore useful - It sometimes purges - when this is the case - and it is not desired we may either reduce the quantity of Calomel or reduce it altogether - now & then it happens that the $\frac{1}{4}$ gr of Tart Emet excites nausea - and as no effects of this kind are wanting we will then content ourselves with the Nitre alone - dose about 15 - Cooperating to the same viz reducing arterial action - is the application of cold water to the surface - there are three modes of applying it - first by dashing it over the body second - by immersion - and third - applying it to the whole surface of the body with a wet sponge - the last is the best and least hazardous mode - It should be employed only when there is great action of the pulse and great heat of the body in such cases it subdues the activity of the blood vessels and causes diaphoresis - and quiets the irritability of the blood vessels and restlessness of the patient - By placing the hands and arms in cold water the heat is sometimes allayed - but

if the application of cold water is deferred until the system is rendered feeble by our remedies or by disease - where there is a feeble pulse and all the symptoms of debility - it is not only useless but absolutely ~~and~~ pernicious - the system is now so low that it is incapable of reacting - and the cold water must of course increase the exhaustion - but it not be forgotten by you gentlemen - that this remedy must not be employed except when the febrile symptoms exist in a high degree - at this period of the disease - the patient is often distressed by thirst or by dryness of the fauces - here the question arises - whether he should be allowed drink - one sect of ancient physicians wholly excluded in their practice every thing like drink in this they have been imitated by the moderns in several parts of Europe - especially in Spain & Portugal with another sect of ancient Physicians it was the custom to deluge the stomach with water - as is generally the case - the truth here lies in the middle - the pain and thirst must certainly aggravate the disease - but judgment must regulate us - If we suffer our patient to drink as much as he wants - the stomach will be filled - retching & vomiting will come on and increase the febrile symptoms - we must therefore allow only a tablespoonfull ^{or about that} at a time - our drinks should be exceedingly mild and not the least stimulating at times drink somewhat tepid will best allay thirst - the patient will demand ~~and~~ cold water &c - has seen copious draughts of good - but this very return will be at all

allowable when it does good here - 1855
~~signs perpiration~~
such as Lemonade - Apple-water - Roast-and-water &c. infusion of
Liquorice or the root chewed will alleviate thirst - these drinks
at the same time will constitute the nourishment of the
patient - every part of our treatment should be alike -
we should not pull with one hand against the other
our object is to reduce arterial action - let us give
no food at all ~~or let it be of the mildest kind~~ - the a-
bove will be amply sufficient to support the patient's
strength after the remedies already mentioned have fail-
ed many have much confidence in mercury urged to a mod-
erate salivation - there is no doubt when patients have
been subjected to the use of mercury the progress of fever
has been arrested - but such is the rapidity of the disease
that it terminates before the mercury has time to make an
impression - It is difficult to produce a ptyalism - when
there is activity of pulse it should not supersede the
other depleting remedies - before the mercury can act the
arterial action must be reduced - but when this is done
the patient feels so much relieved that it is unnecessary
nevertheless there are cases of bilious fever - when it is
necessary to resort to mercury - when they resist all other
treatment - and remain several weeks it is fair to sup-
-pose the existence of visceral obstructions - and there
are only to be cured by touching the mouth with mer-
-cury - nor do we meet with difficulty or uncertainty
the quantity given is almost incredible 2 or 3 ℥.
have been given daily for several days
this can not now be warranted even in hot climates

106 - Give this it rarely affects secretion or perspiration for in a day or two after the administration of the medicine we generally find the mouth affected - Much has been said on the subject of blisters in this disease at present the question of their utility is much doubted and far from being settled. By several modern physicians of high celebrity it is contended that they are highly mischievous - of these the most conspicuous is - George Fordyce - who is generally allowed to be the highest authority on fevers - he says they have no tendency to interrupt the progress of fevers - but on the contrary aggravate them by their stimulating nature - The difference of opinion on this subject - arises from the injudicious manner of applying them - these remedies - when applied at different periods of the disease - their effects will materially differ - when they are judiciously applied - they are among the most certain and efficacious of our remedies - but remember never to employ them until you have secured venesection - emetics & purges - then it is you will find blisters of service - they quiet the pulse - equalize excitement and frequently interrupt the irregular action of the disease - and establish the regular order of health but by hastily resorting to them you will not fail to aggravate the febrile symptoms - as Colowen (the wisest of all men said) "there is a time for all things" This Gentlemen is most strikingly illustrated in our profession must be applied first to the ankles & wrists then to the thighs or to the wrists & ankles alternately

as regards the time of administering our remedies - It is necessary for me to say a few words concerning the management of our patients during convalescence - After an attack of fever - there is generally left behind an accumulation of excitement - when this is the case the patient should either be removed from the sick room to another - or every thing removed from the one in which he has been confined such as grill boxes - phials &c he should be staved and all his clothes changed - all these things being constantly before him keep up an association of ideas - relative to the scene that has past - and have a great tendency to prolong convalescence - about the diet & exercise you will often find patients very solicitous you must be very cautious in allowing them to recur too soon to their former habits - as respects his diet you may suffer him to take sage - barley - water - toastwater - granada - Gruel &c - do not allow him to partake of animal food too early or you will be sure to prolong his restoration to health if not bring on a relapse - After a short time you may allow him to ride a short distance in a carriage if the weather is pleasant - enjoin upon him and his attendants not to prolong the journey untill it becomes fatiguing or untill after night - From various causes this fever during convalescence is apt to degenerate into a chronic form - termed pebricula - or in vulgar If the patient is allowed any thing beside water it had better be diluted small liquor no wine &c

108
language - inward fever - Its symptoms are a small
corded pulse - hot skin - redness of the face - pain in
the head and side - great thirst - scanty high coloured
urine - tension of the abdomen and adematous limbs
and sometimes costiveness or diarrhea - In the first
of these we should not resort to the most powerful pur-
gatives - for they will leave the bowels in a constipated state
and aggravate the symptoms - Rhubarb is here the best
remedy - it purges gently and leaves the bowels in a healthy
state - In a case of Diarrhea ^{or dysentery} Chalk galep will gen-
-erally be found sufficient - It frequently assumes a re-
-mittent type or an intermittent type - and is sometimes
occasioned by congestion of some of the viscera - particular-
-ly the liver and spleen - To cure this disease of the violence
of pain and febrile action - we are obliged sometimes to
have recourse to the lancet - a gentle salivation is what
I have found useful - Nitric acid in the dose of 15 or 25 du-
-ring the day persisted in for 5 or 10 days - Blisters applied to
the side are also useful - or if we wish to invite the disease
off by a sort of drain they are to be applied to the ankles
and wrists The Barks and Tonics are never used until we
have subdued febrile action - If you give the barks
the tongue must be moist and the skin must not be
hot and dry - If vomiting arises in this disease from
bile give an emetic or purge - Magnesia combined
Cullen's directions do not answer for our climate
nor ~~and~~ ^{as} it is scarcely even admissible ex-
cept in its cases in marshy districts - Quinine
is not so objectionable

with epsom salts - is very good - if it arises from instability
 give Peltz water or a combination of R bar Potap $\frac{j}{3}$ - Gum Arabic
 $\frac{j}{3}$ - oil of Menth or Pin - 10 qths Lactarium 30 qths - aqua fortis
 $\frac{4}{10}$ to $\frac{6}{10}$ - Mix dose a table-spoonfull every hour or two - I think
 this an excellent prescription to calm the stomach - The oil
 of Turpentine is used $\frac{4}{10}$ or 10 qths - The bitter infusion as per-
 -pentaria - is a very good Medicine in the dose of $\frac{1}{2}$ - $\frac{j}{3}$ - strong
 coffee without sugar or cream - In Cholera Infantum
 a teaspoonfull of Saccharum - powdered cloves - quilted
 in flannel and wrung out in hot brandy applied to the
 epigastric region - often produces salutary effects - Lime water
 and new milk - draughts - fomentations to the stomach
 old opium pills - an anodyne enema - and lastly an anodyne
 a large blister over the epigastric region - When there
 is great determination of blood to the head - we should
 make use of topical bleedings - such as cups - leeches -
 arteriotomy - but before using them cold - such as clothes
 wrung out of cold water or pulverized ice put in a blad-
 -der should be applied to the ^{part of the lower extremities} head. If there do not give
 relief ^{at the same time} put a large blister on the head - If there is great
 thirst a crust of bread soaked in water or a cracker is
 useful - Vinegar mixed with water or balm tea with ice - is
 likewise good - if there is a furied tongue $\frac{1}{4}$ a $\frac{1}{2}$ gr of Calo-
 -mel given every hour for 3 or 4 hours in succession will
 allay thirst - when there is a scurf on the gums or tongue
 back of the neck first - then the head if it does
 not produce stragery may continue it for some time

110 1/2 The patient is bed

- clean it off with yeast - The chamber should be kept near-
ly dark - and company should be prohibited - their conver-
- sation disturbs the patient - and their breath vitiates the
air - the room should be well ventilated - when he grows
stronger he may eat oysters - which should be either
saw or very little cooked - boiled chicken & the essence
of Beef - - - - -

Typhus Fever a congestive

The name of this disease is derived from the Greek
word Typhos - stupor - or an attendant which is generally an atten-
- dant on this disease - By Nosologists it is divided into two spe-
- cies - viz. Typhus Mitior & Typhus Gravior - Typhus Mitior
late white has divided it into ^{gouty nervous & putrid fevers -} simply inflammatory & con-
- comes on with mildness and runs a more protracted course - it is
- congestive - Chapt. thinks one only an aggravated form of
often preceded by languor and listlessness for several days - or
the other or what we have imitated the congestion
comes on alone without any considerable uneasiness or pain - loss
after the inflammation - shall treat of it as congestive
of appetite and defection of spirits follow - and the disease
gradually develops itself - Typhus Gravior on the contra-
- ry makes its appearance with violence - there is a great pro-
- stration of strength in which the mind participates with the
body - there is tenderness and soreness of the muscles - pain
in the head - Loins and extremities - alternate chills and
heats - ending in full formed fever - with hot & dry skin
great determination to the head - evinced by the suffused
countenance - ^{throbbing of the temporal arteries} wild eye - and tendency to delirium -

1 Typhos - in the Egyptian origin of the name
it signifies an evil spirit - remember this - - -
Chap. does not like the term Typhus as it is apt to lead to
bad practice

The edges moist & ~~more~~ clean III

The tongue is hard and dry - chapped - encrusted - with a dark fur - and
the teeth are covered with scales - the pulse is quick - hard and corded -
the respiration laborious - with much sighing - foetid hot breath - con-
stipation of the bowels - with nausea and vomiting of bilious matter - du-
ring the progress of the disease coma makes its appearance or delirium of
the slow and muttering kind - the fever continues. the pulse becomes
small and frequent - the nervous tremors which existed from the first
delirium ^{now} occurs called typho mania - the bowels become relaxed - with
dark feculent evacuations - hemorrhage from the nose takes place -
no secretion of it - also from the mouth and anus - petechia or vibices are often seen
over the surface of the body - the pulse sinks - the extremities be-
come cold - hiccough ensues and the patient dies - When a
favourable termination is about to take place - these symptoms grad-
ually subside - glandular swellings occur - with scaly eruptions
about the mouth - both of which are very good signs - and
prophetic of a happy issue - the tongue becomes clean and moist
and the skin assumes its natural state - Typhus is an un-
usual fever in this country - it is always confined to mil-
itary Hospitals and to jails of the eastern country - and arises
from poverty - vice and filth - which is not a source of disease in
the U. States - a few cases have occurred in this country - but so
few that experience has been limited - What I shall say to
you on this subject will be principally from my own observa-
tions in European Hospitals - There exists much controversy as
to the cause of the disease - by some it is said to arise from
May terminate in 3 days or 3 weeks if it ^{contagion}
does not yield on the 11th day we may expect
a protracted case - it is a paroxysmal disease

contagion (not one in 30 escaping) and is not exceeded by the small-
 -pox - which we all know to be a highly contagious disease - but
 admitting ^{the} statement of Haggarth in its fullest extent - it does
 not prove that Typhus is contagious - under all circumstan-
 -ces - for it certainly never is the ^{case} where free ventilation exists -
 under certain circumstances - there is no doubt it is conta-
 -gious as in crowded and filthy places - which are seldom or
 never ventilated - you may remember ~~that~~ I told you in a
 former lecture that fever is seldom or never contagious - even
 in public institutions during the summer months ^{it does not appear in} ~~in~~ Tropical
 climates - the reason is obvious - in warm weather the windows
 and doors of the apartment are kept open - and the air freely
 admitted - Contagion (if it does exist) is not allowed to be con-
 -centrated sufficiently to produce disease - its sphere of action is
 very limited - never extending more than ^{do of small pox & m.} six or eight feet - it
~~may extend to an adjoining room~~
 may however be carried by fomites on beds - bedding - clothing &c
~~which attach to walls - boards &c~~
 It is a singular fact that it may be carried in the clothes of
 an individual - who has been exposed to it - and affect oth-
 -ers - while he himself remains unhurt - I observed it in
 the following instances - The redemptioners of an infected
 ship - which arrived in our port - ^{the well} were distributed about the
 city - and not until 5 or 6 weeks had elapsed - did the disease
 make its appearance (after exposure) ^{the} the time is usually
 about 10 days - sometimes it attacks immediately - which is
 evinced by nausea and languor - it has been known to re-
 -^{main}
 the disease caught from infected clothes is said
 to be more malignant than that taken immediately
 from the patient

main in institutions above 60 days without communicating itself
 Dissections show that the stomach is inflamed - and of an erysipelatous
 character - ^{the liver is enlarged and congested} - the vessels of the brain
 and particularly the veins are injected and sometimes there is an
 extravasation of blood and water ^{in the same} in the thoracic and abdominal

[viscera] This disease seems to arise from various causes - a
 very common one is Marsh-Miasmata - it has likewise originated
 from fasting - copious evacuations - solicitude - anxiety - or any
 depression of the mind - In the first stage of Typhus bleeding

Treatment of Typhus derived by some appearances in this fever
 it was the universal practice to bleed in the commencement
 of this disease - this was the practice of the ancients - but by
 no means confined to them - In the first stage of Typhus
 bleeding is of the utmost importance - but we do not often dis-

cover the disease untill it is too late to employ the remedy
 if it is done after the disease is fully established - all our re-
 -medies afterwards will be of no use - 9 cases out of 10 will be sent

victims to the grave - Emetics are used in the former stage - but if
 administered at any other stage they heighten every other symptom -
 and if persisted in will in a very short time sink the patient so
 low that all the other remedies we can employ will be of little use

Emetics in the former stage of the disease ^{it is supposed} act by throwing off
 contagion (or the remote cause whatever it may be) and by ma-
 -king a powerfull impression on the skin system and stomach
 breaking up the morbid chain - or action going on in this organ
 brought on by the lungs are apt to suffer
 from inflammation in this morbid stage

which is the seat of the disease - Ipecac & Emet. Tart. - are used for this purpose - and will answer well when timely administered - ^{at an early stage} they have in many instances arrested the progress of the disease - Whatever be its cause - it is created in the stomach - and by an evacuation or change of action in this organ - the fever is frequently subdued - but where emetics do not accomplish this - they always allay the violence of the disease - and prepare the system for more powerful articles - At one time it was the practice to follow the Emetic with antimonial preparations - so as to induce nausea - this is laid down by Cullen - and followed by all the disciples of the Edinburgh School - the antimonials are found to be entirely useless - of late it has been a fashionable plan to resort to ~~emetics~~ cathartics - after emetics - to Dr Hamilton we are indebted for this improvement - after having been repeatedly disappointed by emetics - he employed cathartics - the result was satisfactory and efficacious - he has been largely imitated by the English practitioners - But he observes that to render them efficacious - they must be long continued and of the most active kind - the one he prefers is calomel alone or combined with Rhubarb or Jalap - which must be repeated every day - until all the offending matter of the alimentary canal - is completely evacuated - of the utility of purging there can be no doubt - the testimony of the British physicians is in its favour and I myself have seen it employed with the most signal and decided advantage - the treatment of typhus has within a few years undergone a very great change but early resorted to - ^{in 3 days} stimulants - ^{in 1818} in Britain they depicted ^{present} more the ^{used} ^{in 1818} the deaths were 1-15 - in 1819 - as 16-21 it was

1817 that free defecation & evacuation was introduced - in the 115

There is always in this fever an accumulation of offensive matter in the bowels - particularly the lower parts of Meckel - that the alimentary canal is in this condition is proved by the encrusted tongue - the foul state of the stomach and fauces - and by the dark patia evacuations - untill the nature of their action is changed we must pour in our cathartics - debility which we might expect from this does not take place - on the contrary the patient is invigorated in proportion as this foul matter is removed from the intestines - indeed it is upon this that the weakness depends - as cooling stools appear they give relief to - uniting with this (nursing) cold applications have been much used - this is very ancient practice - it was followed by Celsus and many writers of his age - but amidst the fluctuations of opinion and change of practice - its use in Typhus was for a long time overlooked - About a century ago - the writer who at that time gives an account of it was so well pleased with its effects - that he called it Febrifuge Magna - About 20. or 30. years ago - the direct application of cold water was made by Perrie of the W. Indies - who published his practice on the subject on the subject - it has not been fully confirmed - Since the publication of his work it has been considerably followed - as regards this question I think the mode has been slenderly employed in this city - all sponge the body and apply cold to the head as in pleuritis - But this is not owing to our want of confidence in the remedy as our attachment to venesection - Justice has not I think been done to this practice - as regards our autumnal fevers - there is nothing so good as the affusion of cold water - purging also acts by restoring the secretions or equalizing the circulation - it is at the same time a counter irritant - phlogosis of the stomach should use mint juleps. colomel & oil

7/6 ~~Chapman~~ ~~Thompson~~ Calomel well prepared one of
the ~~most~~ ~~best~~ ~~preparations~~
It may be obvious to you - that it is only in the first stage
of Typhus - and when there is great heat - that this practice
is suitable - indeed it has been laid down by ~~Burrie~~ ~~And~~
this is only applicable - when the heat is at the highest pitch ^{above the natural heat}
when there is great thirst - flushed countenance - restlessness and
anxiety - ~~no perspiration~~ but if we are inclined to try it in the advanced sta-
ges - (which is sometimes done) he recommends opium - brandy
and the different stimulants to be given before the application
of cold - to induce great action of the system - It must not
be used when there is chilliness - paleness or perspiration - as
to the ~~modus operandi~~ ~~of this medicine~~ remedy - Dr Jackson enter-
tains different views from the generality of practitioners - deny-
ing that cold water acts by abstracting the heat from the body
he said that a tonic impression is produced by the remedy -
but in order that it should do this - the susceptibility should
be previously awakened - by the warm bath - friction and
diffusible stimulants - the susceptibility being aroused -
then totally disregarding the fever, ~~we are bold~~ ^{we are bold} ~~to apply~~ ^{or better} ~~to apply~~ ^{cupping first}
our remedy - as a tonic - the cold water is to be applied at
any time in the disease - whether this view of the subject is
correct or not I shall not say - but the management here
would require so much skill and nicety - that I cannot
recommend it to you - The theory is very plausible and
the practice might be very successful - but we should
not adopt it - until it comes recommended by greater authority
when there is a collapse should always use frictions
stimulating or what is better the vapour bath
for 3 or 4 hours - this brings the blood to the surface

-figural vessels & relieve internal congestion here 17.
The modes of applying cold water are several. by dashing it upon
the body of a temperature of forty or fifty degrees of Fahrenheit. by the
shower bath - and by sponges - Currie's practice has been extensive and
he prefers the first mode. repeated three or four times a day. Cullen
says that cold water may be resorted to when the heat is above the
natural standard - Extraordinary as it may appear - I witnessed
advantage derived from it. in the city of Edinburgh during my
residence there. Two hundred men were brought from on
board a ship to the hospital. with the Typhus fever. Dr Gre-
gory directed buckets of cold water to be thrown over them
and in some instances the effects were truly astonishing
the hot skin and pain in the head vanished - as if the patient
had been touched by a magician - but in others where there
was a partial or no reaction the consequences were generally
fatal. The effects of the shower bath were the same. From what
I witnessed I concluded that it was generally successful - yet
it produced such fatal effects upon some. that upon the whole
it should be avoided as eminently dangerous - as a safe mode
I recommend sponging and here the reaction should be slow and
the temperature of the water about thirty or forty of Fahrenheit
it removes heat - quiets restlessness - and all the effects that con-
sult from cold water - may be had from this mode of ap-
plying it. With Currie none of the doubts respecting the effusion
of cold water exist - But it was my duty to tell you the result
of my own observations - which were numerous and extensive

during my residence in Edinburgh. When the progress of the disease is not arrested by the remedies already mentioned - it is now the universal practice to resort to diaphoretics - at one time no remedy was so confidentially relied on as early and profuse sweating - During the reign of the Humoral pathology - a system of notions prevailed - which originated in the obscurity and eclipse of medical science - They held that all contagious diseases (and Typhus among the rest) depended upon a malarious matter floating in the system. and were to be cured by the expulsion of it - proceeding upon this hypothesis sweating was applied to every stage of the disease and vigorously prosecuted - this is one out of many instances where a false theory has dictated a promiscuous practice - nevertheless there is a point in this disease. when sweating is advantageous - the point is that condition of the body. following the use of the other depleting remedies - as Emetics - purges - and also the application of cold - but there is nothing peculiar in the use of diaphoretics in this case ^{even admitting contagion} they act upon the general principle which I have already laid down in my Therapeutics - all we have to do - is to attend to the system - prescribing the mild & stimulating according to circumstances - It is usual in this stage of Typhus to prefer the milder sort. and the saline mixture which I have mentioned answers exceedingly well - it would seem that the antiseptics were peculiarly suited to the first stage - but they are condemned by so many physicians of note and I give of tartar emetic 5 or 6 gr of the neutral mixture so as to give $\frac{1}{12}$ gr at a dose - very good

authority that we are forced to doubt their utility - why they should not be as beneficial in Typhus as in any other fever - it is impossible for me to say - ^{Chap. 11} ~~That~~ in theory there may be obvious reasoning why certain medicines should be preferred to others - yet when the distinction is settled by great authority - it is our duty in general to abide by the decision - Best consulting all the modern writers you will find it laid down - that all the antimonial diaphoretics are hurtful - they increase the prostration that already exists - and seem not to create a tendency to solution - My experience gentlemen on this subject is so narrow - that I can do no more than offer my reasoning - you must therefore read - hear & judge for yourselves - while we are using the diaphoretics internally you must promote their operation by some of the external means of exciting diaphoresis - the best diaphoretics are the Spiritus Mindereri and the Spiritus Etheris Nitrosi 13 ^{when genuine} every hour or two - the neutral mixture is one of the best ^{large doses - very very seldom genuine - you may give more alone} at this stage if it is not overtaken by the remedies mentioned then takes place an abatement of excitement - with considerable debility ^{and evident symptoms} and we are compelled to change our practice - Under these circumstances there is nothing so valuable as the Vol. alk. - it must be given in small doses to keep up excitement and support the strength of the system - there are several modes of administering it - but the most eligible is in the form of Vol. Julep - which is made in the following manner { R Carb ammoni 3ʒ Gum Arabic & Sacch. alba aa. 13 Olibum Cinnamon 5 grs - Aqua font 53 dose a table spoonfull every 1 great care must be taken not to stimulate too early - but maintain the system as you would a ship -

120 ² - throw a part of the cargo over-board if the ship
is about to sink - not increase the load - the more & heavier the
load or two - This is to be accompanied with wine whey - to
promote its diaphoretic power - wine whey is made by the
- being three parts of milk and one of wine - boil the milk
in small quantity - local bleeding of the hypochondrium
and then add the wine - taking care to reiterate the cure - if
it is too strong dilute it - and sweeten it by adding loaf sugar
as the effect of H.C. Alkali is extremely evanescent - it is proper to
give it in small doses repeated every hour or two - under the same
circumstances we give Camphor - I shall not institute a com-
-parison between the two articles - but if I should make any
distinction - it would be in favour of the succronia - In
-protracted cases the remedies should be alternated so that
when the system becomes habituated to the impression of
the one - the other may be given - In this way you know the
most unequivocal advantages are obtained in the practice of
medicine - There are many modes of giving Camphor - it is
often given in Bolus - but in this way it is difficult to take
and produces nausea - the best mode is the camphorated Ju-
-lip (℞ Camph. 15 - Myrrh 30 - grs - Sacch alba. 25 - Aqua font. 43 -
Dose a table-spoonfull every hour or two) This is used very
much in form of a solution of milk - ^{but vapour is often good} At this juncture pre-
-cisely I have known blisters to be of advantage - They
are condemned by the most respectable authorities as
Fordyce - Pingle &c - ^{& late French writers} but are sanctioned by a large
number of practitioners - They are highly spoken of by
Cullen - we also have a prodigious number of leper an-

- Throates - indeed it would seem if there is any point made out
 in medicine - it is the efficacy of blisters in these cases - By some
 it is contended that synapisms are quite sufficient - to sustain the
 excitement of the system - but this is wrong - the use of blisters
 is objected to in debilitated conditions of the body - as increas-
 - ing prostration - by the evacuation which they produce - in
 my practice I never knew them productive of ^{any} such effects
 and whatever difficulties arise in the point - all allow that
 blisters are efficacious in relieving delirium - applied to the
 head during delirium in Typhus - they are decidedly the
 best remedy we are acquainted with - to obtain their full ef-
 - fects - they should be large enough to cover the whole head
 and should remain ^{until suppuration occurs} on it for twenty four hours - But some
^{my other place} condemn them in these cases - Dr Darwin tells us instead of find-
 - ing them useful - he has generally found them productive
 of harm - I find that Thouars is of the same opinion - -
 Most writers concur in the advantages of blisters - as regards
 this city I know nothing to the contrary - As respects the
 use of Opium in this stage of Typhus - there exists great dis-
 - pute - Brown placed it at the head of his stimulants and
 thought it the best remedy in all low diseases - His view of its
 qualities was acted on by all his disciples - whose example had
 wide influence on the practice of physic - It was once the
 prevailing practice to treat Typhus with opium and wine
 this was the practice until Mr George Fordyce promulgated
 the spinal column is connected with nearly all the
 important functions - has seen a strip of blistering
 plaster applied along each side of the spine effect a cure

122 - when the patient was in the lowest possible stage
his doubts as to its propriety he says "the result of his experience
is - that however the remedy is employed - whether as to the dose
or stage of the disease - it is not only useless - but in a majority
of cases proves mischievous - the influence of his great name has
- ded greatly to impair the reputation of Opium in Typhus
But I think when judiciously employed - it is eminently
calculated to meet some indications - in using it we must
recollect that its effects ^{may be} ~~are~~ greatly modified - by the dose in
which it is given - it may be so managed as to produce -
quite opposite effects - in very large doses the system sinks
under it at once - and no excitement is developed - but in
small doses and at short intervals - we often obtain from it
all the effects of an ^{in usually given for subcutaneous} unequivocal stimulant - In Turkey &
in other countries - whose religion forbids the use of wine - it is
^{low delirium - & watchfulness} ~~to use it in the form of enema~~ customary to employ opium - with the same view that we do
stimulating liquors - but it is alledged that with the same
views of excitement wine is a better remedy - as a general rule -
I admit that wine is preferable because it is grateful to the
stomach - and in most cases is sufficiently powerful - it pos-
- sesses the advantage of being nutritious - it being more perma-
- nent in its effects than opium - There is a choice in the kind
of wine - we should use Madeira & Sherry - or either if they can
be procured good should be employed - Port and the milder
wines have been used - they may be more grateful to the
stomach - but they are in general less serviceable - and are

not so nourishing as the others - being likewise less stimulating we are obliged to load the stomach with them - and the rejection of the whole is sometimes the consequence - it is important to bear in mind - that in the advanced stage of the disease - it is characterized by a want of susceptibility - and in the use of stimulants such large quantities are required - that in ordinary cases the quantity of wine may be as much as a quart in twenty-four hours - and in some cases as much as two or three pints become stronger & fuller - allays in bottles have been taken during the course of the day - ~~at first~~ ^{when} the deliriant subsides.

The first symptom which I mention is delirium - this may arise from opposite states of the brain - if it occurs at the commencement of the disease - we may conclude that it arises from inflammation of that organ - but if it takes place at a more advanced stage - when there are evident symptoms of debility - we must conclude that it arises from an opposite condition - here it is that opium is unrivaled - opium and musk in combination are generally employed - and is very good to relieve delirium of the last stage - which delirium is often associated with restlessness - mental anxiety - and morbid vigilance - here - opium is unparalleled - At a still more advanced period or at the close of the disease - a diarrhea occurs which greatly increases the debility that already exists - opium is not to be dispensed with here - it may be given by itself in sufficient quantities - Bark should be given in decoction and not in substance to restrain the discharge or in form of Chalk pulp

In the conclusion of my last lecture - I was engaged in the consideration of the remedies suited to the second stage of Typhus - This stage for the most part is treated with differrible stimulants - for the purpose of keeping up the excitement of the system - As a remedy in this stage the bark has been much employed - but at present it has lost much of its reputation - the evidence of practitioners on this subject has been very contradictory - while by some great confidence is placed in it - by others it is condemned as useless - this difference of opinion arises from the different circumstances of the disease - in which it has been prescribed - from my own experience I believe there are cases - in which bark possesses the most unequivocal advantages - It would seem that it is applicable neither to the early nor to the advanced stage of Typhus - but if the vigilant practitioner will watch the progress of the disease - he will discover about the middle of its course - that there is more or less tending to give way - an intermission a remission of the symptoms has been observed - whatever be the cause of Typhus in the U. States - it has been known to arise from Marsh. Malaria - At this period it is that we are to resort to bark - as yet I have hardly ever seen a case in which the medicine could be taken in substance - owing to the irritability of the stomach - owing to the irritability of the stomach - which is connected with the disease - we must use it in some of the agreeable forms already mentioned.

Arsenic has been used at this stage - I think it not useful -
 when the back will not agree with the stomach in any phase whatever
 we must substitute in its place - the bitter and aromatic tonics - and
 of all of these the serpentaria is the best - it is also very grateful
 to the stomach - When the disease is attended with subcutaneous ten-
 -derness or nervous tremors - musk & asafetida are of great use -
 Carbonic acid in the form of yeast was once much confided
 in - and practitioners were led to it from supposing that Typhus
 depended upon putridity - which might be corrected by the an-
 -tiseptic powers of this medicine - but now we know that putre-
 -faction never takes place in the living body ^{a discovery of our own country} - thus Peti-
 -chia - eruptions &c - which have been looked upon as symptoms
 of putrefaction - are found associated with a state calculated
 to resist it - The experiments of Moore in dissections - prove that
 subjects who have these appearances - remain much longer with-
 -out putrefying than any other - But incorrect as the theory was
 which led to its use - the practice was a good one - this acid con-
 -taining a grateful medicine - relieving nausea - and imparting tone to
 the whole system - It may be administered in a more grateful form
 than yeast (Not in Seltzer water or malt Liqueurs - of the latter por-
 -ter is far the best it must be ripe & strong) I know nothing more
 grateful to the stomach than London Porter - it is not only stim-
 -ulating but tonic also - producing on the system permanent
 impressions on this account it is more beneficial than wine or ac-
 -cident spirits - In many cases of Typhus - remedies whose effects
 cide + champagne have both been used
 with some success

are of an evanescent character - are useful - Should you be inclined to give carbonic acid in the form of yeast - the dose is one table-spoon-full every two hours - Entertaining the same views of the powers of Mineral acids in the prevention of putrefaction - physicians introduced them into low fevers - about half a century ago - but to Fordyce we owe their establishment as a remedy in this disease - he used them first in Cyranche malignant accompanied with a low debilitated state of the system - and he was so much pleased with their effects - that he introduced them into all low fevers after evacuations by emetics and cathartics - The reports respecting these remedies are in their favour - but as much as they were used in England - they are still more used on the continent of Europe - during the war in Germany they were most successfully used in the Typhus which so frequently raged among the soldiers - Nevertheless it is my opinion - that the virtue of these acids - is very much overrated - during my residence in Europe - I had ample opportunity of witnessing their effects - It is true they are very grateful to the stomach - and sometimes highly beneficial - but I am certain when compared with some other remedies - they will prove feeble - the accounts we have of them do not carry the features of truth - they are heavily laden with the exaggerations of impostors & Empirics - the only indication they are calculated to meet - is allaying thirst - and relieving dryness of the mouth - the physician concealed the remedy the King of Prussia gave 50,000 crowns for the remedy

and fancies - They may however by their tonic power keep up excitement to a certain extent - under no circumstances should they be used to the exclusion of other remedies that have been mentioned - of these the Muriatic Acid has generally been employed - it is given in the dose of 12 or 15 grs in the infusion of columbo - every two hours - and gradually increased - I have now mentioned to you gentlemen the most approved and powerful remedies in the first and second stage of Typhus But it often happens from improper management or from the uncommon violence of the disease - that the system begins to sink - with great rapidity - and death appears inevitable - we must then adopt a new plan - and under these circumstances we must not despair - it is our duty to invigorate our exertions and invoke the resources of our art - Such cases as these are best calculated to stimulate the physician - to the most unremitting perseverance - for he knows that sometimes when there is no hope whatever - by a judicious application of remedies - the face of things is suddenly changed - At this juncture there should be an augmentation of all or some of the remedies which have been mentioned - especially the Vol. Alk. - ardent spirits should be copiously drank - the vol. Alk. - should be given in the dose of 10 grs every half hour - and wine should be taken in as great quantities as the stomach can bear - of late it has been the fashion to give the Cayenne pepper - it is only a few years since it was introduced - by the

practitioners of the W. Indies - they used it first in the low
 stages of Cynanche Maligna - and were so much pleased
 with it - that they used it in Typhus - indeed if we credit
 their accounts - it must be truly an important remedy - it
 is given in the dose of 4- or 5 grs every three or four hours - I
 know not if much benefit is to be derived from blis-
 ters - at this period of the disease - they rarely draw and
 when they do they produce mortification - Two or three
 table-spoonfulls of brandy with Cayenne pepper - ~~is~~ rubbed
 on the surface of the body - produces a glow and is pro-
 ductive of much excitement - I have found that by the use
 of this - the pulse that was hardly distinguishable - was distinct
 - by felt in a few minutes - At this moment a decoction of Cass-
 -tides in spirits of Turpentine is important - dip rags in it and
 apply them - this application seldom produces vesication - at
 this ^{very low state there is dan-} period the antispasmodics have been used - as Musk - Cam-
 -phor - Asafetida - the first is the most powerful - it is given ei-
 -ther in bolus or pulv - the latter is preferable and in all the
 dispensaries you will meet with a formula of this article - I would
 recommend the following - R Musk - Gum Arab - and Sac Alba-
 a. a. $\mathfrak{ss}$. Aqua fort $\mathfrak{ss}$. Mix - f. a pulv - Dose one table-spoon-
 -full every hour - of the castor I know but little. The asafetida
 I have sometimes used with advantage - there are several
 modes of using this - the pill - tincture or watery solution
 the last is the best - R Asafetida 1.5. water 6.3. dose a table-
 -~~spoonfull~~ spoonfull

- Spoonfull - The immediate effect of this is to quiet irritation of the nerves and render the condition of the patient more comfortable - as a general rule - they are not as I know of preferable to opium but there may be cases to which they are peculiarly adapted. In this low state of the disease - there is often much hyper-sensibility in the stomach - from its being habituated to medicine so that the most powerful cathartics will not produce upon it the slightest impression - in this case we seek out some other part or some susceptible surface upon which to apply our remedies - here the rectum presents itself - it has been said the intestines are the ultima morienda - It is undoubtedly true - that when the stomach is dead to all impressions - a powerful one may be made on the rectum - all our remedies may be applied to this part of the system - even at the advanced stages Mercury has been employed - I have already told you that it is used at the commencement of the disease - to evacuate the alimentary canal of the dark - acid - offensive matter upon which the prostration of the body depends - It is here likewise advised if there is no febrile action although there is coma and low delirium - the tongue and fauces loaded with offensive matter - and every appearance of approaching dissolution - Yet at this period mercury is resorted to with advantage - it is given in minute doses every two or three hours - and the mercurial ointment is to be plentifully rubbed on the thighs -

Dr Jackson says that the dark heavy stools are owing to the use of calomel - Alms House

The immediate effect of this is to relieve the bowels of an accumulation of feculent matter - but this is not the only view with which it is prescribed - it acts by creating a mercurial fever - and changing the face of things - and often produces action approximating to health - whilst we are administering the mercury - we must not omit our other remedies - the wine - Opium and Pot. alkali must be continued and perhaps the calomel when combined with these articles is more beneficial than when given alone - The mercurial treatment of Typhus is not altogether a new one - it was introduced 4 or 10 years ago - and the evidence we have in its favour is sufficient to warrant us in having recourse to it - In desperate cases I have witnessed the most unequivocal advantage from its use. In the last stage of the disease when the patient appears almost lifeless - wrap him up in a blanket - and pour warm brandy over him - in the sinking stage - dry heat - as hot oats are to be applied to the body. To relieve the hiccup incident to the last stage of the disease - a table-spoonfull of ~~oil~~ ^{friction with brandy} ~~with lime water~~ ^{great use} or a table-spoonfull of brandy with sugar dissolved in water - Musk - oil of Amber - or Magnesia - either will sometimes do it - Emphasis over the Epigastric region - foot tea - made by pouring boiling water on foot - a table-spoonfull given every hour or two - the potash mixture - a table-spoonfull of vinegar - Eliser Petrol 20 or 30 grs are all very good - In the debilitated state of the stomach - stimulating

It is of great efficacy & changes the direction of the
bowels medicines are to be employed - such as the oil of Turpentine
I have now detailed to you the treatment of Typhus fever -
but little will this avail - if the practitioner is not influenced
by other considerations In this fever free ventilation of the a-
partments of the patient is of the greatest importance - it has
been observed in the U.S. - Not merely moving the patient
from this room to another room - has had the effect of chan-
ging the fever to a simple remittent - In some cases this is
not practicable - and in these we must have recourse to other
measures - The bed clothes should be kept clean and of tin
changed - The linen of the patient should be changed every day
The excrements be removed as soon as they are evacuated - The
floor should be kept clean and sprinkled every hour or two
with vinegar & water or what is better with ardent spirits
coughing must be entirely excluded - this is very impor-
tant in all fevers - and more particularly in Typhus - Cough-
ing operates mischievously by taunting the air and distract-
ing the mind of the patient - producing delirium to
which he is already disposed - - - - -

Nitrous or Murietic acid vapours where there
is many patients crowded together
diet - should be farinaceous -

phosphorus in the very low state of the system
see his therapeutics

having exhausted the mineral resort to the vegetable
kingdom - & invoke the aid of heaven - without
which all our remedies will be useless

Typus Oeterodes or Yellow fever

For a minute history of this disease I refer you to the writings of Dr Rush - which indubitably contain the most correct & best account - that has been given of any malady - The yellow fever is an epidemic of Tropical climates - particularly of the W. Indies Islands - It has however occurred occasionally in the U. States - ever since the first settlement - the differences of opinion concerning this disease - have been - partly numerous and disputes on the subject have been carried on with violence - but there is hardly a single point connected with it - less unsettled now. than at the commencement of the altercation - With regard to its importation it has been conceded on all sides - that each time of its occurrence it proceeded from ships in some manner or other - If local filth about our wharves - from our common sewers - were its sources - we should be troubled with it every season - for these same sources are always in existence - and always acting - besides ~~our~~ scavengers would have been the chief victims - but Dr Rush tells us that only one single scavenger was affected by it - I do not believe the disease to be imported in a perfectly formed state - but I believe that vessels from tropical regions bring with them - the materials from which it is produced - It seems to that some peculiar conditions of the atmosphere are necessary for its production

By a regular register which has been kept here - of the state of the atmosphere - for a long series of years - it appears that the yellow fever cannot be introduced here - unless through the summer - Fahrenheit's thermometer - be at least of the mean height of 80° - when it has transcended this point the disease has regularly prevailed among ~~the~~ ^{and} with a violence proportioned to the ^{degree of} heat. A similar register kept in New York warrants the same conclusion - with respect to that city - that the yellow fever is not in its general character of a contagious nature - seems satisfactorily made out from the following arguments - First - Because it is an Epidemic - and must therefore depend on some more general cause - than contagion - and because it never spreads beyond the city affected with it - Second - It is well known when it prevailed to so fatal a degree among is - Physicians - Nurses and Dejectors - who were always about the dying and dead of this disorder - were not more liable to be attacked than others - Third - Because the disease is universally suppressed by the coming of cold weather - a hard frost uniformly puts a stop to it - In this it differs from any other human contagion the necessity of shutting our apartments and the consequent want of free ventilation - invariably increases their energy & power - Fourth - Because cases of yellow fever have occurred in the country remote from the city and where they could not possibly have originated from contagion - On the contrary it is alledged by those who contend for the contagiousness

-ness of the disease - First - That every time of its occurrence here - it originated from one point - from whence it could be traced extending itself in all directions - Second - It has actually proved contagious in the country - to this point we have the respectable authority of Dr Wether and many other physicians. Third - It is obedient to the common law of contagious fevers - in its not being able to affect the system more than once. This is a point on which medical men differ vastly. Dr Horack has made a mistake when he asserts that all the medical men with whom he conversed in Philadelphia agreed with him in this opinion. Dr Chapman has changed his opinion and Drs Doisy & Physic would no more have allowed this - than they would concede ^{that} the New York school is superior to our own. The English government being greatly interested in the decision of these questions - instituted a medical board of the most respectable physicians - these gentlemen after mature consideration made the following report. First. That it can never be taken twice by the same person - they state that in the number of regiments in the Peninsula from the W. Indies - where the men had the fever before - not a single case of reinfection occurred - they point out the vessel by which the disease was introduced into Cadiz - it did not begin (they tell us) in the dirty part of the town of course was not produced by filth of a local nature - the garrison of Gibraltar is situated

on a rock - a position as little favourable to the introduction of
 disease or pestilence as any in the world - yet the disease was car-
 ried there from Cadiz & spread by contagion - It is not absurd or
 repugnant to our understanding - to believe that this fever may
 at least be occasionally contagious - when I was a student of medi-
 cine at Edinburgh - the English fleet infected with Typhus
 ship fever - landed the sick at the hospital - very many of the
 students who attended there caught the disease and many of them
 died - the contagion can proceed (as in common opinion)
 from the excretions of the sick - if it did the disease produced
 would vary with the the differences of the excretions - their
 state of putrefaction &c. - but the fact is otherwise - all con-
 tagion - I believe to result from a secretory action - they dif-
 fer according to the different kinds of stimuli applied to the
 vessels - when the yellow fever then assumes the Typhoid type
 (which it not unfrequently does) I am fully persuaded of its con-
 tagious nature - tho' under other circumstances - I believe it
 is not - Dysentery presents us with an analagous case of a
 disease changing its character in this respect - when Typhoid
 Dysentery also becomes contagious - and so it is in not a few in-
 stances - Concerning the nature and treatment of yellow fever
 there has not been less difference of opinion among physicians
 some supposing it a disease of local action call it Typhus
 Petrolides and their treatment is correspondent with this belief - I
 know not what may be its appearance in the W. Indies - but

here it is always of a very inflammatory character - demanding to be
 treated with vigorous depletion - To Dr Rush is due the credit
 of dissipating from among us the former error - but his theory
 on this subject is very objectionable - He supposes it to be a highly
 aggravated form of bilious fever - seated as that is in the
 Hepatic system - this is an erroneous idea - for not one symp-
 -tom of vitiation or accumulation of bile occurs in yellow fever
 the stomach is the part at which it points its attack - the nu-
 -merous dissections made by Dr Physic have shown that the
 morbid appearances were exclusively confined to this vis-
 -cus - which showed all the degrees of inflammation from the
 slightest redness of the veins - to gangrene & spracles - Dr
 -Physic found no disease of the liver - Brain or any other organ - he as-
 -certained the black vomit - so much dreaded in this disease -
 to be an altered secretion from the stomach - I have seen this
 black matter vomited up in cases of miasmatic fever - of Hydrophobia
 and when violent poisons have been swallowed - in none of which
 can we look elsewhere for its production than in the stomach - The
 sudden death which frequently takes place in yellow fever (after
 but slight previous complaint) is an almost peculiar termination
 of gastric inflammation - There is certainly a specific difference
 between yellow fever and our indigenous Bilious fever - our
 practice was once however grounded on the belief of their
 identity - While the plan of vigorous evacuation was followed
 in this city by most practitioners - many of the French phy-

-sians from the W. Indies. pursued a different method - by fomenta-
 -tions - warm bathing &c - to root the instability of the stomach -
 and afterwards wash out by copious dilution - all offending mat-
 -ter - each of these modes of practice was ineffectual - as the bills
 of mortality at the time will shew - The mercurial remedies
 were early and fairly tried here - the fever of Tropical climates
 is undoubtedly best managed by them - given in the largest possible
 doses - and externally applied - the quantity administered seemed al-
 -most incredible - from four to five hundred grs being taken in
 two or three days - and a proportionable quantity used in fric-
 -tion - Salivation was the aim - to obtain which - mercury was
 poured into the system at every avenue - at first this practice
 was considered among us as singularly efficacious - but -
 cooler and more accurate observation has dispelled the illu-
 -sion - however when salivation was induced very early in the
 disease the febrile symptoms usually gave way - for the two
 actions cannot exist together - But the difficulty is to obtain
 the mercurial affection of the system - the medicine is so slow
 in its operation - that if we could produce it in the usual time
 it would be too late in this very rapid disease - the febrile
 state of the system retards its action extremely and often
 prevents it altogether - a case of yellow fever much resem-
 -bles the disease from acid poison taken into the stomach
 in the gastric aneurism and its consequences which are to be
 observed - When the gastric affection began to be taken notice of

our practice of course underwent a great change - called at an early stage of the yellow fever - our first object is to subdue inflammation of the stomach - and bleeding is our first means of doing this 20 or 30 $\frac{1}{2}$ of blood were taken by some of our physicians to check the progress of the disease - and if this end was not obtained in the first bleeding - they repeated it as often as necessary - Dr Jackson tells us of his taking from 50 to 90 $\frac{1}{2}$ to arrest it at once in the commencement of the fever. I have never had the courage to go so far - the pulse is not always to be trusted in this disease - in the visceral inflammations it is often small & weak untill opened by the use of the lancet - Evacuations from the alimentary canal are excellent auxiliaries to venesection - emetics were formerly used but are now discarded as useless & injurious - purgatives are better suited to the case - of these the mercurial purges are the best and they should be very freely administered - as there exists a very strong tendency to constipation - I have seen 1-3 of calomel given without much effect the dose usually sufficient is from 10 to 20 grs after the bowels are fully opened - we must use the milder laxatives - as Epsom or Glauber Salt or Castor oil - Bleeding is extremely useful in this disease - it is most proper to excite it by external means - especially the vapour bath - from the great instability of the stomach - we cannot use the antivenereal or Nitro - Glycer powders are not found of much service - the sudorifics best adapted to the case are the At-

Eupatorium - Spiritus Mindereri and the saline mixture - The heat of
 the skin is frequently very great and requires to be kept down by re-
 frigerant applications - which are much used by the ~~the~~ India practitioners
 nor must we neglect them Local Applications a blister should
 be placed over the stomach: and in advanced stages over the other
 parts - Not applied to the Epigastrium should be very large. I have
 never been better pleased than with the effects of blistering here -
 soothing the stomach - equalizing excitement - and calming the pa-
 tient to sleep - The most distressing symptoms attending on this
 disease are nausea and vomiting - These are to be relieved by
 the use of lime water & milk and a trial of all the remedies pro-
 perly mentioned - proposed of the power of calming irritability -
 When the fever is pretty far advanced - the Spiritus Turbenthinae is
 an admirable remedy - the next most troublesome symptom is de-
 lirium here topical depletion is demanded by leeches - cupping - or opening
 the temporal artery - cold should also be applied - and if these means prove
 ineffectual a blister over the head - This disease having been observed to be
 attended by veniprions - the Peruvian bark was sometimes
 given - but I have always found it hurtful - increasing nausea
 - exciting vomiting &c - Opium was found necessary to calm the
 irritability of the stomach - but it is never of any service when
 administered by the mouth it must be injected per anum - The
 amount of the practice in Yellow fever is briefly this - in the ear-
 ly stage of the disease if these remedies be commenced and stea-
 dily persevered in - they are usually as successful as can natural-
 ly

-ly be expected in a disease of such violence - if any asserts he has done more than this he has deceived himself and the truth is not in him - - - - -

Pneumatic fever

Fever have ^{been} from time immemorial divided into two classes Idiopathic & Symptomatic - but this is perhaps the most trifling of all the distinctions in Nosology - All fevers are symptomatic - this is already acknowledged with regard to those excited by wounds or by the introduction of some virus by inoculation or those produced by the action of some poisons from the different articles as Opium - Arsenic - &c - But we shall also be persuaded that it holds no less true of all kinds of fever - They arise either from marsh effluvia or contagion - the matter of them it is generally allowed is taken into the system by being entangled in the saliva and swallowed - hence the stomach must be primarily affected and the blood vessels secondarily - some indeed contend that these causes enter the body at the surface or by the Lungs - But the skin is by far too unsuceptable an organ - and we all know that not one of the constituents of the atmosphere can obtain admission into the Lungs - they are mere excretories - But allowing that either of them is correct - my point is still true - for the affection of the blood vessels will in these cases also be secondary - My doctrine is briefly this - fever originates from local

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irritation and spreads afterwards to every part of the system - The stomach is the part usually affected first - and by the sympathies - which connect it with the whole system - the disturbance diffuses itself generally - Hectic fever is excited by whatever causes great irritation - It was formerly thought to arise solely from the absorption of pus - but this opinion is incorrect - for it often prevails when there is no matter focused - and the largest quantities do not in many cases produce it - The causes which give rise to Hectic fever are - First - White Swelling - Swellings in the joints from Rheumatism or Gout - Second - Scirrhous & Scrophulous ulcers - particularly in glandular situations - Third - Congestion & obstruction in the viscera without any ulceration - Fourth - Simple irritation as from a stone in the bladder - or the passage of calculi along the gall-duct - I have known a case where it originated from the irritation of a pin - which finally made its way out of the vagina - Fifth it has been caused by the general irritation of pregnancy - Hectic partakes of the nature and type of intermittent fever - but they may be distinguished by attention to the following circumstances - First the paroxysms of Hectic are rarely regular for any number of days together - coming on at any hour of the day or night without observing any order - Second - The paroxysm of Hectic is not always preceded by a chill - and there are violent rigors - sometimes not succeeded by any hot stage - Third - They are not relieved by perspiration - Fourth The hot stage of Hectic is always attended with a peculiar circumscribed blush on the cheek

Fifth - The tongue is always clean and preternaturally florid and polished - whereas in intermittents it is foul - with a far of a white or bilious hue - Sixth - The appetite and powers of digestion remain unimpaired in Hectic and the bowels are regular - but in intermittents we always find gastric uneasiness - loss of appetite and costiveness - Seventh the urine during the paroxysm of Hectic is turbid - during the apyrexia it is limpid and pellucid like water - but in intermittents the case is exactly the reverse - Eighth The mind in Hectic is proverbially lively and cheerful - whereas in intermittent it is usually much dejected and depressed - The treatment of Hectic does not differ much from that of Intermittents - It is naturally divided into two parts - First - That to prevent the paroxysm - Second - That which is proper during the apyrexia - 1st of that preventive of the paroxysm - during the paroxysm - the medicine - but adapted to meet the indication is Opium - but we cannot venture to aid it with any of the diaphoretics - as no great debility usually exists in the case - on the same account we do not scarce meddle with the paroxysm during its continuance - Second - the treatment during the apyrexia - Hectic fever may be either inflammatory or otherwise - if an inflammatory disposition prevails - we must reduce the system - before we can give tonics and it is sometimes necessary to practice venesection - taking a little blood at once - and repeating it as often as circumstances may require - The alimentary canal not being loaded or

oppressed - evacuations from it are not necessary - I think however
emetics are of great service - tho: not as evacuants - but from the
strong impression (formerly explained) which they make on the system
By this impression emetics are of essential advantage in all disor-
ders of a periodical type - the system being thus prepared - we
must resort to tonics - the Peruvian bark is the medicine of Cullen
who praises it very highly in the Aetia of Pthisis - but my con-
fidence in it is not very great - I have always found it - in what
-soever force given - to offend the stomach - and mostly run
off by the bowels - in combination with Myrrh it is useful - but
I prefer the Myrrh alone - or in some other combination - the
following is a very famous prescription - R Myrrh 25 = Sulp Ferri
1.5 = Carb. Potas - 1.5 = Sugar 25 = Water 5 or 6 3 = Dose a Table Spoonfull
every three or four hours - Henbane - Hen lock - Folu - Arsenic
Vinegar is the best remedy 2 or 3 3 = Camomile - Gentian - Quassia
Columbo & perpentaria - I think are all better adapted a-
-dapted to the case than Peruvian Bark - The wild Cherry-
-tree bark I have often employed and think it an important
remedy in this disease - Uva Ursi is prescribed by some physicians
Arsenic has been largely given and is highly recommended by
several respectable physicians - in the trials I have made with
it I have been much disappointed - Sacc Saturni is thought by Di Pau-
-win of Charleston to be an excellent remedy in the Aetia of
Pthisis - I have not yet found it of much service - by my con-
-fidence in the source from which my information is deriv-
-ed

I shall not hastily abandon its use - Of the mineral acids - Nitric is the best - given at the same time with Opium in pretty large doses - I think it the soundest practice - I order so much of the acid as can well be drunk and immediately before the paroxysm is expected - Sulphur - this medicine is useful in all diseases of a periodical or paroxysmal type - Dr. Physic thinks it is the best of all our remedies in cases of Hectic - and tho' I cannot go so far as that I cannot but recommend it very highly the dose must be small so as not to excite purging - Charcoal - In a case in which I lately employed it I derived great advantage - but as this is but a single case I shall not say much of it - We must particularly attend to the patient's apartment indeed I have known the disease carried off by free ventilation - the room must always be well aired - Exercise is of great importance - the exercise of gestation - and particularly riding on horseback - is to be preferred -

Pneumonia Typhodes

This disease was first discovered in New Hampshire in 1806 from which it spread through New England - entered the Canadas and finally raged all over the United States In the year 1813 it made its first appearance in this city - coming among us without any premonitory sign - it did not then excite much alarm - nor was the aggregate of mortality very considerable - but on its return the next winter - it was more envenomed - and its -

attacks were very frequently mortal - It is a perfect Proteus-ap-
 -suming every variety of shape & requiring a vast diversity of treat-
 -ment - Its attack was always attended with great prostration and
 debility - for the most part it commenced with alternation
 of heats and chills - the skin was dry and pale or mottled -
 the face livid or bronzed the alae-nari contracted - the forehead
 polished - the eyes wild and glassy - and the whole counte-
 -nance expressive of the greatest anxiety & distress - the pulse was
 usually of no great volume - but hard - like a small chord
 soon sinking very much - the head was a good deal affected -
 with wandering delirium - a lethargy and stupor - ~~The~~ attack
 was sometimes extremely violent & sudden - persons having
 been slain down by it - while engaged in their common occupa-
 -tions and died instantly - In a great number of instances howe-
 -ver it came on with pain in the extremities very violent at first
 fugitive - afterwards fixing in the head - occasioning dimness
 of vision - perhaps blindness - delirium - Coma - Paralysis - ex-
 -treme languor both of body & mind - parched tongue - ~~the~~ symp-
 -toms if not removed increase rapidly - vertigo ensues - with
 painful stricture across the forehead and eyes - unconquer-
 -able vigilance - or somnolence - muttering or uttering of violent
 rhapsodies - If the patient retains his senses - he is extremely
 affected - sighs frequently - complains of uncontrolled wan-
 -dering of his imagination - there is the greatest anxiety - agitation
 & distress - exciting in the mind the greatest sympathy & the -

most ardent desire to be relieved from his wretchedness. - There was sometimes no local determination - neither chill nor fever. - The pulse was very frequent - at about 140 or 150 in a minute - some oppression of the precordia and slight tension of the forehead - This state was highly deceitful & dangerous - on a sudden the symptoms of debility make their appearance - and destroy the patient. - But the most common form of the disease was that ushered in by all the signs of pneumonic inflammation - chill & fever - pain in the side - difficult respiration - fainting, cough & spitting of bloody mucus - a flushed countenance & suffused eye. - In more southern climates and in those natives of the south who have fallen under my care - there was much gastric distress and vomiting of bile - the pulse full - voluminous & strong but soft and easily compressed with the finger - in all the symptoms resembling bilious pleurisy - these symptoms do not continue long - for a day or two or perhaps a few hours only - This sort of case was very common among us - there was usually at first a slight affection of the throat - and the patient did not seem very ill - but on a sudden respiration was much impeded - and great prostration took place - the throat and fauces if now examined appeared of a dark brownish or mahogany colour very dissimilar to the appearance of active inflammation - This form of the disease was frequently met with in Alexandria prostration takes place - the mind as well as the body sinks - the patient is distracted - or in heavy stertorous slumbers - the -

tongue and fauces are covered with a dark coloured crust - the countenance is
 excessively haggard & distressed - sometimes Petechia or vibices are seen over
 the body - from thence the disease received the name among the common people
 of Spotted Fever - they appear very rarely once perhaps in an hundred ca-
 ses - I have seen cases where the throat was the chief seat of the disease
 coming on with the usual appearance of common cold - and we are all
 at once surprised with an attack of fatal debility and oppression -
 this I think its most malignant form - What shall we call the disease?
 many of the cases of it will not come under the nosological defini-
 tion of Fever - there is however generally inflammation of a weak
 erysipelatous character in one or all of the great cavities - there is
 generally found an extravasation of a dark blood - and exuda-
 tion of an imperfectly formed Lymph or effusion of a bloody - we
 cannot hesitate considering it a variety of Typhus action - differing
 a good deal from common Fever of Hot Claps - It commences in
 the cold of winter and is dissipated by the warmth of spring - - -
 paupers are not unfrequently brought into the almshouse - torpid
 with cold - from which state they are with difficulty roused
 and the result is a disease nearly resembling the one under con-
 sideration - That here Pneumonia Typhodes is not produced or
 propagated by contagion - is fully proved - it possesses all the
 characteristics of an epidemic - like all epidemics it forces
 all other existing diseases to acknowledge its supremacy and
 to put on its livery - During its prevalence the lancet should
 not be used in any form of the disease - but we should

give cordials and stimulants - I have had reason in a very
 few cases to suspect contagion - Many believe in its contagious-
 ness - and there are strong facts in their favour - it is said the troops
 from the lakes could be traced in their different routes - by the
 propagation of this disease - In this statement I am inclined to
 believe there is a mistake - I believe the disease they spread
 to be genuine Typhus - which is known to be contagious - The
 causes as have been mentioned - are generally errors of diet
 exposure to the vicissitudes of the weather - fatigue and every
 thing that depresses the system Treatment - There are two
 modes of treating Typhus pneumonia - the first is by direct
 stimulants and the second by the sweating plan - I decided
 - by prefer the latter - and the minds of our physicians are
 pretty strong in its favour - You have been fully told of the
 of the most useful diaphoretics - Those best suited to this
 case are Dovers powders - one every three hours - Opium
 alone with warm wine whey and hot fomentations - to the
 different parts of the body - legs - armpits &c - when the dis-
 ease has advanced at an advanced stage - the fearless em-
 ployment of cordials must be resorted to - The Vol. Alk. is in
 this disease the Unicum remedium - I had almost said the
 ipe again - it must be given with no sparing hand - in a
 dose from 5 to 10 grs every half hour - with hot toddy & wine
 a decoction of cantharides in the spirits of turpentine -
 should be applied to the surface to produce ^{re-}actions

In the anginous affection - we should administer emetics and those of the most active kind and a repetition of this operation is often necessary - such as Emet-Tart - James's powder are said to be of much advantage by their fine diaphoretic effects after vomiting - After vomiting we must pursue the plan of Mercurial purging - and the rest of the treatment already mentioned - Blistering is very useful especially to relieve pleuritis or a determination to the head and throat - the blisters should be very large with regard to bleeding - there has been a great deal of dispute - I think it is never admissible - tho' in many cases it would seem to be called for loudly in every way - the blood is always very ricky and capped - I never saw the lancet used without serious and very fatal consequences - but physicians of great respectability and entitled to much confidence - with whom I correspond tell me they did bleed in this disease and with great advantage - the experience of this city is against bleeding in every form of the disease - Prognosis It is in Typhus pneumonia peculiarly difficult - the pulse often fails us - in situations of imminent danger - the countenance is marked by a peculiar expression of wretchedness or is completely inanimate - like the face of Adonis or bronzed appearance of the forehead I have observed to be an invariably bad sign and fatal symptom - This disease so much dreaded is under the treatment I have described far from being ^{necessarily} mortal - But we must pursue with vigour the plan laid down - and employ with undeviating steadiness the appropriate remedies - The number of deaths is found to be proportionably less than in Yellow fever - - -

Peſtis - or Plague

Having never ſeen a caſe of this no more can be expected from me than a brief diſſert of what is contained in the beſt authors on the ſubject - Cullen has located it among the Exanthemata very improperly as it is a febrile affection - bearing a great reſemblance to Yellow Fever - The plague was very little underſtood among us till of late years - During the invasion of Egypt - the medical men both of the French and Engliſh armies paid very particular attention to it - and their writings have thrown great light on the ſubject - They ſhow that contrary to the ancient received opinion - That if the peſtilence is at all contagious - it is not ſo in common circumſtances - never except in crowded and ill ventilated places - It was never communicated by casual viſiting or by diſſection. In Egypt it moſt undoubtedly proceeds from the exhalations of the Nile - it is always found to follow the reception of its waters - Like all other fevers from Malarial Miasmata - Peſtis assumes various types - it is either of an Inflammatory or Typhoid character according to circumſtances - M^r Gregor obſerved among the troops ſtationed near a marsh - That the diſeaſe appeared an Inter-mittent type or a remittent character - Though in Egypt - elsewhere and at all other places times it has undoubtedly proved contagious - In Europe during the time of its viſits - the inhabitants by cloſely ſhutting themſelves up - precluded its influence - Thus

in Rome in 1607. The monks secluded in their cloisters escaped the infection entirely - It has been asserted (but not on the best authority) that the same precautions are followed by the same security in those countries even where the disease is so commonly and generally prevalent - It is uncertain at what distance of time - the attack of the plague succeeds the exposure to its exciting causes - sometimes nausea-languor & lassitude for several days previous giving warning of the approach of the disease - but it often supervenes without any premonitory symptoms - The patient is seized with rigors heat & nausea - oppression & anxiety &c - the pulse is at first tense and chorded - but soon sinks - These symptoms are soon followed by hurried breath - vomiting of a dark coloured matter similar to the black vomit in yellow fever - carbuncles - petechiae &c - The plague sometimes extinguish life in a few hours - at other times the patient lingers for 20 or 25 days - Dissections shew much the same appearance in the stomach as are found in yellow fever - frequently the liver and the whole of the chyliferous viscera diseased - In its symptoms and character it bears a great resemblance to yellow fever - They arise from the same causes - prevail at the same season - an attack of either is said to destroy the susceptibility to another attack - The circumstances of climate - manner of living &c make a difference in the appearance of the two diseases - Carbuncle has supposed to be a characteristic of plague - but I have seen Carbuncle - petechiae &c in yellow fever - and they are not uncommon in Typhus Gravior Treatment - In the first stage

an Emetic is said to be the most efficacious remedy. It has been
 asserted frequently to have arrested the progress of the disease or pre-
 vented the full formation of it. Emesection is next in order. This is
 a very ancient practice - as old as Protagoras - recommended by Syden-
 ham & Keppell who informs us that the natives use this remedy
 in moderate quantities. The French & English physicians differ
 much in opinion with regard to bleeding the effects of bleeding
 in this disease. The truth here lies in the middle - it is sometimes in-
 jurious at others indispensable. Sweating has long been the es-
 tablished practice - as a tendency to natural diaphoresis is obser-
 -vable in many cases. This was perhaps urged to far - forcing sweat
 by treating it with stimulating articles - which often produce fatal
 prostration and exhaustion. Among the French & English troops
 it was found very advantageous - when managed in a proper
 way - Antimonials & the Vapor bath were their chief remedies
 the latter was best suited to the case. Some physicians however
 prefer the use of cold applications - externally by effusion - but
 more generally by sponging - it is asserted that there are productions
 of the best effects - some rub the surface of the body with cakes of
 ice - One writer states that it was not uncommon for the delirious
 patients ^{in the plague} to escape from their attendants - and leap into the Nile
 and this uniformly proved beneficial. It is also related that
 a rain which fell upon and thoroughly wet the French troops
 in a forced march - cured the sick who were exposed and re-
 lieved all of them - Much has been said of the excellence of

friction with olive oil - by two of the British Consuls in the East
 Baldwin & Jackson and Medical authorities have not been wanting
 to the same point - a late traveller however tells us it was a story
 made up by the poor Turks to obtain from the benevolence of
 Mr Baldwin a supply of oil. Vesications are very useful espe-
 -cially in relieving local affections as of the head and stomach
 &c. - In the same stage in which there are proper - we may use
 also with advantage the Vol. Alk. Camphor and other stimulants
 But in the early stages of the plague the Rhubarb plan has
 been always fatal - Mercury is too slow in its operation the
 disease terminates long before salivation can be induced
 The plague under proper management does not appear more
 fatal in proportion than yellow fever. Deogenitas asserts
 that not more than one third of the sick died - which is nearly
 the same degree of mortality observed in yellow fever -

Hæmorrhages

Hæmorrhages have long been divided into active & passive. This
 distinction was originally made by Stahl & he has been followed
 by modern writers - but the line of demarcation between the two it
 is almost impossible to draw - They are either accidental - vi-
 -carious or critical - We are only to speak of the first - as the last are
 always salutary - and the vicarious are never dangerous - unless
 they take place in some important viscus as the Lungs - Brain &c
 Cullen very properly defines active hæmorrhage to be pyrexia -

with a flux of blood not produced by external violence - the flow of blood is generally preceded by a sense of fulness and distention - heat & itching in the part - Hemorrhage sometimes assumes the intermittent type - in early life it proceeds from the arteries - and in old age from the veins usually - when it takes place from the Liver - spleen - Stomach & Rectum - it is always venous - from the nostrils - uterus & Lungs - it is always arterial - The causes of Hemorrhage are various - a predisposition is always occasioned by a change in the balance of the circulation - which takes place at the age of maturity - by a change in the constitution of parts owing to the blood being determined to them - Hemorrhages happen most usually in plethoric habits and in the spring - but sometimes in thin - spare persons on account of congestion from unusual circulation in various organs - produced by peculiarity of temperament and constitution - The accidental causes are First - Motion - power quickens the circulation or concentrates its force in any one part - fits of passion - running - leaping - lifting heavy weights and strong venereal desires not indulged are of this class - Second - heat externally applied - it was formerly supposed to act by rarefying the blood - but this opinion is erroneous - as the blood is not a very dilutable fluid - but there is no doubt that heat is a predisposing cause - by its stimulating the circulation - and relaxing the integuments - Third - cold when applied suddenly or to the extremities acts by exciting the circulation and directing it to the internal parts - Fourth - The detension

^{or}
 -nation of the weight ~~of the~~ density of the atmosphere - causes Hemorrhage
 as perceived in ascending great heights. Dr Linnæus tells us that on
 the summit of Mount Blanc - the blood gushed from his mouth -
 ears - gums &c without his having made any violent exertion
 Humboldt says the same thing happened to him on the top of one
 of the peaks of the Andes - Ligatures retarding the motion of
 the blood a position directing it to any particular part are
 causes of Hemorrhage - such bleedings as are caused by acci-
 -dent at extremities - as wounds - blows - falls &c belong to the pro-
 -vince of Surgery Hemorrhage may take place in four different
 ways from a rupture called Rhexis - from erosion called diachrosis
 from transudation called diapedesis - and from anastomoses or
 an oozing of blood from the exhalant vessels - ^{the last of these occurs particularly in lungy affections} Treatment - here at
 the threshold the question meets us - is it justifiable to interfere at
 all - or must we leave the hemorrhage to the direction of na-
 -ture in all cases? Stahl & his followers believe that we ought - as
 they are produced to relieve from some oppression - and will
 cease voluntarily when the purpose is answered - Indeed in some
 cases the doctrine seems to be true - and in fact it is sometimes
 painful and injurious to put a stop to bleeding - as when there
 exists danger of apoplexy - Palsy &c - But the efforts of nature are
 not always salutary - and we must sometimes take the business
 entirely out of her hands as she often throws out blood in in-
 -proper places and in injurious quantities - In those cases in
 which we interfere - the indications are First To stop the flow

of blood at once if profuse and when it is active or febrile this is best done First by direct evacuations from the system Second - By refrigerants - cold applications are to be made externally and also medicines of this class are to be given particularly the Neutral Salts - Third - Sedatives - such as Digitalis - squills - Tobacco &c By astringing the mouth of the vessels - the most conspicuous of the remedies to effect this are Alum - the Mineral acids - preparations of Lead - Revulsion - This plan is very important and successful - Stimulating pediluvium and embrocations have been much used - but are very equivocal in their effects - Cupping - Leeching and vesicating applications are to be made to prevent Hemorrhage by removing the predisposing causes - the chief of which being plethora - we must resort to a low vegetable diet - blood letting is only of momentary advantage and has ultimately a bad effect - and the same may be said of all other evacuations - Exercise is a very good auxiliary - it promotes the excretions & secretions - which detract from the circulating mass - I go on to speak of particular Hemorrhages and of it is Hemoptysis - - - - -

Hæmoptysis

Or spitting of blood - The blood may issue in these cases - either from the Lungs - Trachea - or Fauces - In the last case it is usually brought up by hawking - without pain - cough - oppression or febrile

excitement and sometimes on examination we are able to distinguish
 the source in the throat - A Hemorrhage from the Throat is sometimes
 of very serious importance and demands very serious and particular
 attention as being in some instances the precursor of ^{the} Phtisis - I have
 seen cases of this kind - where Catarrh ended in Consumption -
 In Hemorrhage from the Lungs the blood is frothy & frothy - brought
 up with more or less cough - By attention to these circumstances
 and others to be mentioned - it can be readily known from
 Haematemesis - It is produced by all the general causes of debility
 already mentioned - but there are some particular causes - such
 as predisposition from conformation - a prominent chest - a nar-
 row thorax - delicate make - and sanguine temperament - It
 is excited by long ^{or loud} speaking or singing - violent exertion - catarrh
 or cough - suppression of an accustomed evacuation - Haemoptysis
 occurs in a great majority of cases at night - when there is least corpo-
 real action - whether this be owing to a predisposition occasioned
 by a state of sleep - I am not certain - There are several species of
 it which take place in several ~~ways~~ different ways - First from acciden-
 tal rupture of a vessel - as a fall or wound - this is not of moment if the
 wounded vessel be a small one - Second - From excessive inflamma-
 tion as in pleurisy - pneumonia &c this is very rarely of any consequence
 Third - from Metastasis - as when there is a suppression of the menses
 - piles - bleeding at the nose - this is not important unless the flow
 be large - or there exists in the patient a predisposition to phtisis - Fourth
 from Plethora either general or from the Lungs - and then do not

invariably run into ²²P²²htisis - as persons in this state often attain to great
 longevity - some of the most aged now known - have been subject
 to these periodical discharges from the Lungs - Fifth - From ab-
 -scess or ulcers in the Lungs - and here it is brought up mixed with
 pus &c by proper and judicious treatment this has been cured in
 many cases - Sixth from tubercles - almost always fatal - event-
 -uating in ²²P²²htisis - I shall next treat of that kind of Haemoptoe ~~which~~
 is connected with too high arterial action - The circumstances at-
 -tendant on this are a sense of weight or oppression in the breast
 - short dry cough - difficult respiration - with full hard pulse - and some-
 -times all the symptoms of fever - chill succeeded by heat - cold
 extremities - lassitude &c - The chief indication here is the reduc-
 -tion of arterial action - and the first means of effecting this is venesection
 Dr. Keberden objects to this but its efficacy has been clearly demonstrated
 by experience - it probably acts by producing absorption and inviting
 an influx of blood into other parts - The quantity should (to answer
 the purpose) be very large - small and repeated bleedings as
 advised by some are idle and unavailing - my practice is to take away
 at once and by a large orifice enough to subdue arterial action
 When this is done direct the use of common pott in tea or table spoonfull
 doses - every ten or fifteen or twenty minutes - of its efficacy there is
 not the least doubt - it is very prompt in its operation - and has
 been found highly successful by the practitioners of this city ---
 Its Modus operandi is not very intelligible - I think its effect on the
 mouth and fauces - is carried down by continuous sympathy into the Lungs

when it constricts the bleeding vessel - Cold applications also should
 be made to the thorax - and to the armpits - the axilla are peculiarly
 susceptible of the application of cold - In cases of great urgency - it
 has been recommended to wrap the whole body in a sheet wrung out
 of vinegar and ^{cold} water or the affusion of cold water on the body - or
 immersion in it - but the danger must be very great to justify
 such practice - the risk of detaching to the internal parts by the
 shock is very great - the administration of Sac. Saturni is no new
 practice - but from fear of the deleterious effects of lead - it was
 long suffered to lie dormant - Dr. Barton has the credit of re-
 -viving it - If the vigour of the circulation is increased - it ought
 to be preceded by venesection otherwise it will prove mische-
 -vous - the common dose is ij grs - with Opium - but if we ex-
 -pect with this quantity to restrain large bleedings we shall be
 disappointed - I am not prepared to say what would be the effect of
 a large dose - but I do not think the experiment would be attended
 with much danger - I once gave a scruple - it did not stop the Hæmor-
 -rhage - but it produced no bad effects - I knew an old woman
 to take (by mistake) ij ss - of it - and she was actively purged without
 without colic or spasm - Alum would seem to promise much - but
 it is incapable to check Hæmoptysis if at all profuse - I would use it
 only after the bleeding was stopped - to prevent its recurrence - What shall
 I say of Digitalis as a remedy in Hæmoptysis - it has been highly extol-
 -led in all active Hæmorrhages - but my experience always teaches
 me it ought never to be trusted to as a substitute for the lancet

and even after bleeding has been procured - it is a very precarious medicine - in small doses it does not act promptly enough - and when we increase the dose it endangers vomiting - It is better suited to chronic cases of Haemoptysis - with pain in the side - slight cough - weakness - with great mobility of constitution - in these circumstances we shall derive great advantage from the use of Digitalis - Emetics were very much recommended by Dr Robinson about fifty years ago - but the practice has not been much followed yet vomiting will sometimes check Haemoptysis - I have seen it stopped by the spontaneous occurrence of vomiting - the worst case I ever met with was cured by or suspended by a dose of Digitalis which produced vomiting - however I do not like the practice - when the flow of blood is large - in slow & chronic cases emetics are very serviceable - In the first stage of Haemoptysis - the practice is so tedious that it ought not to be resorted to - until common remedies have failed I concur however in the almost universal opinion of physicians - of the efficacy of these remedies - in nauseating doses any of them may be used - the vitriolated solution - has been highly extolled by Drs - Mosely & Barton I know nothing of it from my own practice having never prescribed it I can however from an enlarged experience recommend Opium employed so as to keep up a steady nausea for eight - ten or twenty four hours - the dose is $\text{gr} \frac{ij}{\text{gr}}$ with opium $\text{gr} \frac{1}{2}$ to be repeated as often as necessary - Refrigerants - Nitre has been much used and the flow of blood has been often checked, it is very good either alone or in combination with - he has given it - such large doses as to act on the kidneys largely diluted 1 or more times he has been with more safety in a day than the $\frac{1}{2}$ of a saturated solution

the antimonial preparations in small doses - The mineral acids are given with precisely the same view - but as they seem to be astringent - they may be resorted to at an earlier period of the disease to assist in stopping the Hemorrhage - We must not rely on them by any means to the exclusion of those medicines of which I have spoken - The Bit-phuric acid is the best of these - the dose is 15-20 or 30 grs. every 2 or 3 hours - The elixir vitæ answers just as well - Local Applications of have already mentioned cold - Vesication is of no little importance the proper situation of the blister has been much disputed - but the majority of Physicians (and I fully believe) that they ought to be put on the chest - the efficacy of such applications ^{is} in proportion to the proximity of the part affected - except when we wish to break morbid association - and for this we blister the extremities. There can be no doubt of their singular efficacy - to this point a vast weight of authority can be advanced - Attention must be paid to other circumstances Absolute rest in bed with the shoulders elevated - should be enjoined ^{on} the patient - the chamber should be kept cool & well ventilated - all company should be excluded & the patient not allowed to talk as the flow of blood has been often thus induced - His diet should be very low - consisting of decurculent & gelidulated drinks - ^{the stomach must not be at all loaded.} The bowels must be kept soluble - ^{the} no great benefit is derived from active purging - We come now to treat of passive Hemorrhage or the flow of blood connected with the feeble action of the system & whether occurring primarily or as a consequence of active Hemorrhage - There is ^{little or} no difference in the treatment - ^{except that} no evacuant or debilitating occurring among violent ^{or} re-
apours subjects - ^{hard & small} the blood at times flows rapid ^{not} - check the flow No. 9. 3.

161 The rest as given before & ^{good} ~~superficial~~ is often very
-bitating remedy is to be made use of. The indications are to sup-
-port the strength of the system - and to impart tone to the blood
-vessels - On means of performing these are - Tonics - The Peruvian bark
stands very high - Dr Rush spoke enthusiastically of it - it is com-
-monly given alone - but I think it is much improved by a combi-
-nation with the chalybeate preparations - The vegetable astrin-
-gents Kino and catechu have been used - but from my experience
I attach little importance to them - The mineral acids are to be
preferred - and they are better adapted to this than active Hemorrhage
The more astringent effect is best produced by the sulphuric - but when the
case is combined with scrophulous affection - the Nitric should be given
- ^{on horseback} These must be aided by moderate exercise - nourishing diet
- without liquors - particularly porter - by the habitual use of porter ma-
-ny cures have been effected - When Hemoptysis is connected with con-
-stitutional circumstances - it leaves behind great disposition to
recurrence - The patient should be put under a strict prophylactic
plan - First - he must avoid every cause which excites the circulation
his diet should be of milk - ^{vegetable} moderate exercise should be taken - and
every excess abstained from - Second - he should take every pre-
-caution against cold - catarrh is very dangerous to persons in this co-
-dition Third - when strong predisposition to Pleurisy exists - the
state of the pulse & chest should be attended to - and all oppression
or excitement removed - by small bleedings - rest - ^{for the time} low diet - Nitro-
-se - much may be done by blistering - the blisters should be applied
to the chest or axillae or wrists when they act by effecting revulsion -
The Sac Pat - of great use to check the Hemorrhage

Fifth Mercurial salivation may be tried in obstinate cases Sixth -
 Emetics frequently repeated in this state of things are entitled to
 much confidence - they relieve cough and oppression - displace the dis-
 -ease from its seat - and give our other remedies an opportunity to act
 After all these fail - and the disease is stubborn - there is a dernier
 resort - we must advise removal to warmer climates - and by a sea
 voyage - even this frequently fails - but cures have been thus ac-
 -complished - when every other plan of treatment had failed - In-pro-
 -portion to the difficulties - our exertions should increase ne-
 -ver considering any thing done while any thing remains undone - - -

We should not treat for the mere temporary
 flow of blood but must prevent its return
Epistaxis on arterial Hemorrhage

- 1 The most usual time of its occurrence is about the age of puber-
 -ty - after menstruation is established it very rarely takes place in
 girls - It is produced by all the general causes of Hemorrhage -
 but particularly by heat - ^{or cold} tight ligatures about the neck - blows
 on the part - hanging the head &c - When it arises from constitution-
 -al plethora it is preceded by pain in the head - vertigo - dimness
 of vision - ^{heat} itching of the nostrils &c - The more severe attacks are
 ushered in by coldness of the feet - alternate rigors - flushed -
 countenance - and throbbing of the temporal artery - ^{treatment the} 2^d The indi-
 -cations are first - To check the flow of blood Second - To do a-
 -way the tendency to recurrence - To stop the bleeding the pa-
 -tient should be placed in a cool situation - standing or sit-
 -ting
 1 a predisposition exists in such as have large head
 & short necks
 2 may occur suddenly or otherwise & be active or passive

- ting erect - with the head reclined a little backwards - cold
 in pouce pouce or other is to be applied to the back of the neck
 the nose - apilla or to the peristome ^{there failing} - the nostrils should be
 plugged with lint either dry or steeped in pouce astringent
 liquor or wet and then covered with powdered charcoal - ^{a solution of alum or galls or tanna or powder}
 the nurse calls for it - venesection is to be performed - the whole
 head immersed in water made very cold - by dissolving in it
 Sal-Ammoniac a common salt - Compression must be made
 upon the bleeding vessels - a thread should be carried by a probe
 through the posterior nares and a sponge drawn into the nostrils
 by it - To prevent the recurrence of this hemorrhage - the patient
 must avoid all the exciting causes by an adherence to the an-
 tiphlogistic plan - in his diet - drink &c. - When the circulation is
 active - he must be bled occasionally and topical bleeding by
 cups or Leeches is useful - Purgatives are especially indicated
 here - by the constipation which universally exists in these ca-
 ses - Blistering the neck & extremities is useful - as is the es-
 tablishment of an artificial drain somewhere which I believe
 will always succeed - In critical cases or when there seems
 to exist danger of asphyxia &c we must not imprudently put a
 stop too suddenly to the discharge in Epistaxis - it will be ac-
 cording to strengthen the patient at times - by ^{soft repetition} exercise & Re-

Menorrhagia ^{artificial} - bigo Ferri

A flux of menstrual fluid - immoderate either in quantity - length
 of duration or frequency of recurrence - In these respects however
 if he should encounter an obstinate epistaxis from a
 cachectic habit he would try emetics - the loss of blood from
 the nose & rectum affects the patient more than any others

women differ so much - that ~~only~~ as disease we must only treat of that -
flow of blood connected with debility - pain or sickness - the menses
have been proved not to be blood - but a regular secretion - that men-
-orrhagia or a profuse discharge of this secretion is very rare - and some-
-ly demands medical aid - we may keep the patient at rest, in a cool ven-
-tilated apartment, on low diet, acillated drinks, such as Creams -
-Porter, the bowels should be kept open, if there is much irritation an
opiate should be given - What is commonly called Menorrhagia I have ^{always}
~~generally~~ found to be a simple hemorrhage of pure coagulable blood,
from the uterus, it may take place either in the impregnated or in
the unimpregnated state of that organ - Flooding which occurs im-
-mediately before or after delivery comes under the consideration of
the professor of Midwifery - I shall only say that in those floodings
previous to delivery the child must be removed as soon as possible
to allow the uterus to contract - Uterine Hemorrhage is sometimes ve-
-ry copious - demanding very vigilant attention, and the employ-
-ment of vigorous measures, it may be connected with a highly ex-
-cited or debilitated state of the system - ~~the causes are none of them - generally - but for~~
~~menstrual congestions~~ ^{erect of venery} - When it is met with
it attended with head-ache - giddiness - dyspnea and with a tense
chorded pulse - direct depletion must be resorted to - to reduce ar-
-terial action - bleeding - rest - saline laxatives and the whole of the
antiphlogistic plan is to be pursued, after the effect has been
produced sufficiently - then we may use astringents - ^{but never if the} the case. Some
is supposed of great powers here - all physicians who have used
it concur in this opinion and my own experience is highly in its favour
the menses from uterus - note the ears & an discharge
of blood
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The common dose of ij. grs. with $\frac{1}{2}$ gr. of opium is idle - to derive any advantage from it we must prescribe boldly 5 or 6 grs - every half hour - a hour - I have given before I succeeded in checking the Hemorrhage 40 or 50 grs - and I never saw any bad consequences follow - it sometimes induced irritation of the bowels - like the stimulating purgatives. Ipecac - has acquired great reputation in the treatment of Hemorrhage in general - but displays its powers best in Uterine Hemorrhage - it is in this case equal if not superior to the Sac. Saturni. - to do good it should be administered in nauseating doses - not to effect vomiting - which though not uniformly pernicious, seems rather precarious - I have known spontaneous vomiting produce a cure - but I am not certain what - would be the effect if brought on by artificial means - I have met with many cases where the bleeding ceased as soon as nausea was created by the Ipecac - The modus operandi of this medicine is not at all understood - it has been referred to its astringency - but medicines far more astringent do not produce half the effect - Many and others think that it acts by its antispasmodic powers - allowing it to be antispasmodic - which is far from ^{having been} ~~being~~ proved - we know that remedies more decidedly of this class are of no advantage - others still - suppose it to check the flow of blood - by the nausea which it produces - but this is controverted by the fact - that the most powerful nauseants fail completely when Ipecac succeeds - The mineral acids may be given when the flow of blood is no longer copious - sulphuric is the best of them the dose 40 or 50 gtt

album in the atonic cases is production of much and the greatest advan-
 tage - particularly when given in combination with Kino and catechu -
 Digitalis has been proposed as a remedy in the active stage of the he-
 morrhage and is recommended by Drake - Currie and Ferriar - we should re-
 -ver trust to it as a ^{in this or any case of active vascular action} substitute for the lancet when the flow of blood
 is copious - the bold employment of the lancet can only save the pa-
 -tient in such cases - but after arterial action is subdued - if the flow
 of blood is small we may recur to the Digitalis - if large I believe it
 does mischief by increasing the debility and relaxing the vessels -
 Opium is very freely prescribed in Europe and testimony might be col-
 -lected of its efficacy in all circumstances of the disease - but I be-
 -lieve it has been too indiscriminately employed - in the first or
 active stage I believe it generally does harm - but it is admirably
 adapted to those cases where the bleeding is kept up or promoted by
 irregular motions of the Uterus with pain - after copious vene-
 -section has been performed - local applications such as cloths wrung
 out of ^{cold} water or vinegar are usually laid on the pudenda or ab-
 -domen - injections of astringent fluids may also be resorted to. of
 Alum - Lacc. Saturni. and white vitriol - but I cannot say any thing of
 them from my own experience - ^{Dr Dewees prefers the rectum} In cases attended with local irita-
 -tions I have found injections of Opium into the rectum very ser-
 -viceable. In addition to the local applications above mentioned - a
 leech or the cold wet cloths may be thrust into the vagina - but the
 way in which I employ cold water with the most advantage - is by
 pouring it in a small stream from a height upon the abdomen

These uterine Hemorrhages mostly occur in an active state of the circulation and with symptoms of an enfeebled & debilitated state of the system & are sometimes of a febrile inflammatory character - entitled hence Passive & Atonic. It is to be treated precisely like all other passive Hemorrhages as detailed ^{except of course} when speaking of Hemoptysis. There is a peculiar species - showing itself in very old women - or what is called ~~about~~ the turn of life - recurring every 4 or 5 days - the flow may be either moderate or copious - it is at times a very important & extremely dangerous disease - it sometimes proceeds from debility or topical relaxation - but is more generally owing to the presence of cancer. Dr. Hark used to call it the consumption of the uterus. ^{or hemorrhage must rest on a cancer the metastasis & of course} generally fatal - ^{from cancer cured by an operation} The treatment is such as has been recommended when we were on the subject of Hemoptysis - a low diet of milk particularly -

• bark 2 or infuse in a quart of water for one or 2 days. Then give a wine glass full several times a day - this is to be given when we wish to improve the strength

where the Hem. returns periodically tabulate rest for 2 or 3 days before it occurs with low diet

About the period of the entire cessation of the menses there will be small Hem. - not of much importance - R.S. & low diet to restrain the flow of blood & uterus are of great

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The first thing I noticed when I stepped out of the car was a
sudden change in the temperature of the air. It felt like I had
stepped into a different world. The humidity was not just a
background noise, it was a presence. It clung to my skin, making
me feel like I was being hugged. I had heard that the humidity
in New Orleans was something to be prepared for, but I didn't
realize it would be this intense. The air was thick and heavy,
like a warm blanket. I had heard that the humidity was bad, but
now I was experiencing it firsthand. It was a strange feeling,
like I was being embraced by a giant hand. I had heard that
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As I walked through the city, I noticed that the humidity was
not just a background noise, it was a presence. It clung to my
skin, making me feel like I was being hugged. I had heard that
the humidity in New Orleans was something to be prepared for,
but I didn't realize it would be this intense. The air was thick
and heavy, like a warm blanket. I had heard that the humidity
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